

SEQUENCE LISTING

Seq ID 1

| | | | | | | |
|-------------|-------------|-------------|------------|------------|------------|------|
| atgggtgaaaa | acaccggcga | attgaaaaaa | ctttcagaca | cttatgagaa | tttgagcaac | 60 |
| cttttaacca | attttaacaa | cctcaatcaa | gcggtaacga | acgcgagcag | cccttcagaa | 120 |
| atcaatgcc | cgatcgataa | tttaaaagca | aacacgcaag | ggctgattgg | cgaaaaaacc | 180 |
| aattccccgg | cgtatcaagc | ggtgtatttg | gcgctcaatg | cggcggtggg | gctgtggaat | 240 |
| gtgatagcct | ataatgtcca | atgcggtcct | ggtaagagt | gggatcaaag | cgtaattttt | 300 |
| gatggccaac | caggacatga | ttcaagatcc | attaattgca | atttaaccgg | ttataacaac | 360 |
| ggggttagcg | gccctttatc | cattgacaat | tttaaaacgc | ttaatcaagc | ttatcaaact | 420 |
| atccaacaag | ctttaaaaca | agatagcgga | tttctgtttt | tggatagtaa | aggaaaacaa | 480 |
| gttaactataa | aaataacaac | acaaaactaat | ggagctaata | aaagtgaaac | tactactact | 540 |
| actactacta | ctaattgacgc | tcaaaccctt | tgcgaagaag | ccagtaaaat | gataagcgtc | 600 |
| ctcactacaa | actgcccatg | ggtaaatacc | gctcataact | caaacggggg | tgcaccgtgg | 660 |
| aattttaata | cgacagggaa | tgtgtgtcag | gtttttgcca | cggagttag | cgccgttact | 720 |
| agcatgatca | aaaacgcgca | agaaatcgta | acgcaagctc | aaagccttaa | caaccgcgca | 780 |
| agcaatcaaa | acgcgccgaa | agatttcaat | cottacacct | ctgctgatag | ggctttcgct | 840 |
| caaaacatgc | tcaatcacgc | gcaagcgcaa | gccaagatgc | ttgaactagc | cgatcaaatg | 900 |
| aaaaaagacc | ttaacactat | cccaaaacaa | tttatcacia | actacttggc | agcttgccgc | 960 |
| aatgggggtg | ggacattacc | tgatgcaggg | gttacttcta | acacttgggg | ggccggttgc | 1020 |
| gcctatgtgg | aagagacgat | aaccgcctta | aataacagcc | ttgcgcattt | tggcactcaa | 1080 |
| gccgatcaaa | tcaagcaatc | tgagttgttg | gcgcgcacga | tacttgattt | tagaggcagc | 1140 |
| cttaaggatt | taaaacaacac | ttataacagc | atcaccacga | ccgcttcaaa | cacgccaat | 1200 |
| tccccattcc | ttaaaaattt | gataagccaa | tcacataacc | ctaataacc | cgggggctta | 1260 |
| caggccgttt | atcaagtcaa | ccaaagcgct | tattcgcaat | tattaagcgc | cacgcaagaa | 1320 |
| ttagggcata | accctttcag | acgcgttggc | ttaatcagct | ctcaaaccac | caacggtgcg | 1380 |
| atgaatggga | tcggcggtgca | aatagggtat | aaacaatttt | ttggtgaaaa | agaagatgg | 1440 |
| gggttaagg | attatggttt | ttttgattac | aaccatgctt | atatcaaatc | cagctttttc | 1500 |
| aactccgcct | ctgatgtgtt | cactttatgg | taggaacag | atgtctcta | taactttatc | 1560 |
| aacgataaag | ccaccaaaaa | caataagatt | tcttttgggg | tgtttggggg | gattgcgtta | 1620 |
| gctggcactt | cgtggcttaa | ttctcaatac | gtgaatttag | cgacattcaa | taatttttac | 1680 |
| agcgctaaaa | tgaatgtggc | gaatttccaa | ttcttattca | acttgggctt | gagaatgaat | 1740 |
| ctcgctaaaa | acaaaaagaa | agcagcgat | catgtagctc | agcatggcgt | ggaactaggc | 1800 |
| gtgaagatcc | tacgatcaa | cacgaattac | tattctttgc | taggcactca | actccaatac | 1860 |
| cgcaggcttt | atagcgtgta | tttgaattat | gtgtttgctt | ac | | 1902 |

Seq ID 2

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|------------|------|
| atggcaaaag | aaatcaaat | ttcagatagc | gcgagaaacc | ttttatttga | aggcgtgaga | 60 |
| aaactccatg | acgctgttaa | agtaaccatg | gggccaaagag | gcaggaacgt | gttgatccaa | 120 |
| aaaagctatg | gcgctccaag | catcactaaa | gatggcggtga | gcgtggctaa | agagattgaa | 180 |
| ttaaagtggc | cggtagctaa | catgggcgct | caactcggtta | aagaagtagc | gagcaaaacc | 240 |
| gctgatgctg | ccggcgatgg | cacgaccaca | gcgaccgtgc | tggcttatag | cattttttaa | 300 |
| gaaggtttga | ggaacatcac | ggctggggct | aaccctattg | aagtgaacg | aggcatggat | 360 |
| aaagccgctg | taagccattat | taatgagctt | aaaaaagcga | gcaaaaaagt | ggcggttaaa | 420 |
| gaagaaatca | cccaagtggc | gaccatttct | gcaaactccg | atcacaatat | cgggaaactc | 480 |
| atcgctgacg | ctatggaaaa | agtgggtaaa | gacggcggtga | tcaccgttga | agaagctaa | 540 |
| ggcattgaag | atgaactaga | tgttgtagaa | ggcatgcaat | ttgatagagg | ctacctctcc | 600 |
| ccttattttg | taacaaacgc | tgagaaaatg | accgctcaat | tggataacgc | ttacatcctt | 660 |
| ttaacgggata | aaaaaatctc | tagcatgaaa | gacattctcc | cgctactaga | aaaaaccatg | 720 |
| aaagagggca | aaccgctttt | aatcatcgct | gaagacattg | agggcggaagc | tttaacgact | 780 |
| ctagtgggtga | ataaattaa | aggcggtgtg | aatatcgag | cggttaaagc | tccaggcttt | 840 |
| ggggacagaa | gaaaagaaat | gctcaaagac | atcgctattt | taaccggcgg | tcaagtattt | 900 |
| agcgaagaat | tgggcttgag | tctagaaaa | gctgaagtgg | agtttttagg | caaagccgga | 960 |
| aggatttgtga | ttgacaaaga | caacaccacg | atcgtagatg | gcaaaggcca | tagccatgat | 1020 |
| gtcaaaagaca | gagtcgcgca | aatcaaaacc | caaattgcaa | gcacgacaag | cgattatgac | 1080 |
| aaagaaaaat | tgcaagaaag | gttggctaaa | ctctctggcg | gtgtggctgt | gattaaagt | 1140 |
| ggcgctgcga | gtgaagtgg | aatgaaagag | aaaaaagacc | gggttgatga | tgcgttgagc | 1200 |
| gcgactaaag | cggctgttga | agaaggtatt | gtgattggcg | gcggtgcggc | tctcattcgc | 1260 |
| gcggtcctaaa | aagtgcat | gaatttgcac | gatgatgaaa | aagtgggcta | tgaatcatc | 1320 |
| atgcgcgcca | ttaaagcccc | attagctcaa | atcgctatca | atgcgggtta | tgatggcggt | 1380 |
| gtggtcgtga | atgaagtaga | aaaacacgaa | gggcattttg | gttttaacgc | tagcaatggc | 1440 |
| aagtatgtgg | atatgtttaa | agaaggcatt | attgaccctt | taaaagtaga | aaggatcgct | 1500 |
| ttacaaaatg | cggtttcggt | ttcaagcctg | cttttaacca | cagaagccac | cgtgcatgaa | 1560 |
| atcaagaag | aaaaagcggc | cccagcaatg | cctgatatgg | gtggcatggg | cggatggga | 1620 |
| ggcatgggtg | gcatgatg | | | | | 1638 |

Seq ID 3

| | | | | | | |
|------------|------------|------------|------------|------------|------------|----|
| atgaaaatta | aaaatatctt | actgagtggg | gggagcggga | aacgcctatg | gcctttaagc | 60 |
|------------|------------|------------|------------|------------|------------|----|

| | | | | | | |
|-------------|------------|-------------|-------------|------------|-------------|------|
| cgtagcctat | accctaagca | atTTTTaaag | ctTTTTgacc | ataaaagctt | gtttgaattg | 120 |
| agTTTTaaaa | gaaacgcttc | cttagtagat | gaaacgctca | ttgtgtgcaa | tgaaaagcat | 180 |
| tattTTTTtag | ccctagaaga | gataaagaat | gaaatcaaaa | acaaaagcgt | gggtTTTTta | 240 |
| ttagagagct | tgagtaaaaa | caccgctaac | gccatcgctt | tgagcgcttt | aatgagcgat | 300 |
| aaagaagatt | tgctcatcgt | tacgccaaagc | gatcatttga | ttaaagacct | tcaagcgat | 360 |
| gaaaacgcga | taaaaaaagc | gattgatcta | gccccaaaaag | gtTTTTtagt | cactTTTTggg | 420 |
| gtgagtattg | acaagcccaa | cacggagttt | gggtatattg | aaagccctaa | tggttttagat | 480 |
| gtcaagcgat | tcattgaaaa | gccaagccta | gacaaagcga | tagagtttca | aaaaagcggg | 540 |
| ggTTTTtatt | tcaatagcgg | catgtttgtt | ttccaagcgg | gcgtTTTTtt | agacgaaacta | 600 |
| aaaaagcatg | ccccactat | tttaaagggg | tgtgaaagag | cgtttgaatc | tttagaaaaac | 660 |
| gcgtattttt | ttgaaaaaaa | gatcgctcgt | ttgagcgaaa | agagcatgca | agatttagaa | 720 |
| gacatgagta | ttgatatagc | cttaatgcaa | caaagccaca | aatcaaaat | ggtagaattg | 780 |
| aacgccaaat | ggagcgattt | agggaaattt | aacgctcttt | ttgaagaagc | ggctaacgag | 840 |
| cctaaagaaa | atgtcagctt | gaatcaaacg | cctgtTTTTg | ccaaagaaag | cgaaaataat | 900 |
| ttagtgtttt | ctcataaagt | gagcgctctt | ttaggcggtt | agaatttagc | ggttattgac | 960 |
| actaaagacg | ctcttttaat | cgctcataaa | gacaaggcta | aggattttaa | agcttttagt | 1020 |
| aacgaggtag | aaacaaacaa | ccaagaattg | ttgcaaagcg | acactaaagt | ctatcgccct | 1080 |
| tgggggagtt | atgaagtctt | gcatgagagc | ggttgttaca | aggttaagat | tttagaagtc | 1140 |
| aaaccaaacg | caaggctttc | tttcaaaaag | catttccaca | ggagcgaaac | ctgggtagt | 1200 |
| attagcggga | tggcgagcgt | ggagttggat | caccagttgt | ttgaattgca | agctaagag | 1260 |
| tccacttata | tccctaaaaa | caccctacac | cgcttggtta | attacggcaa | gatcccttta | 1320 |
| attatcatag | aagttcaagt | gggagagtat | gtcgggtgaag | acgatattgt | gcgcattgat | 1380 |
| gatgatTTta | acagacaaaa | tcaaaacgcc | | | | 1410 |

Seq ID 4

| | | | | | | |
|------------|-------------|-------------|-------------|------------|-------------|------|
| atggctgaat | ggaaaacgga | tacagaagaa | gtcaaagagg | ttgttaaaaa | atgcagggaa | 60 |
| tttaaaagat | ccttacaaga | agaaaaatgc | agtccattta | tcaaagacct | tgatagttac | 120 |
| gcgctaaaaa | tcatagtgga | gcgcagaaaa | attgaacacc | aattgcaaga | agctatagaa | 180 |
| aaattaaaga | tgagcaaaaa | aaagagaagt | agcttttggg | gatcctttgt | agagggtgcg | 240 |
| agagatcttc | ttgatattgg | caggagagatt | atccacacct | ctaaattggg | tgctgaagct | 300 |
| tgtgataaag | ttttaaatct | tatggaagac | aatatagaaa | aatgggaaca | caatgtaagg | 360 |
| ttattagaac | gaatgcttga | aatctacgcc | actcaagcca | aagcgagcgc | ggaacttgta | 420 |
| gagggagctt | ggaagagcgt | taaaaagtgc | ttggactttt | ataccgataa | gcaccaggaa | 480 |
| tttatcaaac | tgttgaacta | tgcgagtga | gcgatagaca | acgaatacaa | tatcgcgccc | 540 |
| ccagaaattt | tgaacgagag | cgattttgaa | agccctacga | ttgtttataa | ccctaaaaaa | 600 |
| agcgtttatg | atgaacactt | gaaagatttg | aggggaagatt | ttagcttttc | tttatacgct | 660 |
| gatttgaaaa | acagaattaa | cgcttcttct | aagctagatc | gcaccacaac | ctctaaagag | 720 |
| caagaatttg | aaaagaattt | agaggatttg | atgccaggct | ttagagggtg | aactgacact | 780 |
| ttgtctggcg | atgaattaga | gcacatggca | agcttttagag | ggcaagaatt | tgaaaagaat | 840 |
| ttagaggatt | tgatgccgag | ttcttttaggc | gtgcattctt | atgatgagag | cttgaattta | 900 |
| gccaaaaaga | attgctgtta | aaattgttaag | aaagcttttag | gagattttac | agaaaaaatc | 960 |
| aaagaatccc | ccaacgattt | gaacgctata | aacgaagctt | ttaatcattt | ggaaacagag | 1020 |
| ttagaacgcg | ctacagaaaa | tttgagccaa | aaaatagcgc | ctattttaga | gcggtatgaa | 1080 |
| aatgataaag | gggttatggc | gagtttttag | gagtttttag | aaaaagaaaa | agagggtctt | 1140 |
| atggtagatg | agcaaaaccc | ttatccggaa | gaagtccgct | ttaatgagtt | gcgttttagcg | 1200 |
| gaatttgaga | gcgttttttag | cgccattgtg | ccttttagagg | atttagataa | acctgcatgc | 1260 |
| gctcatcatg | ccctaaaggc | tttagaagcc | acgcttaaaa | atagggattt | gggctttgat | 1320 |
| gcgacagaat | tggaaacagat | cgcaaaaggt | ttcattccta | aggggtattt | gtggcatttt | 1380 |
| gacgcgaatg | ttttaggga | gtggcggtt | gtgagagaag | agttattatt | aggcgtgaaa | 1440 |
| cacacgaaag | gatacttact | atggaaacaa | ttcctgcaaa | ctcagaac | | 1488 |

Seq ID 5

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| atgaacactt | acgctcaaga | atccaagctc | aggttaaaaa | ccaaaatagg | ggctgatggg | 60 |
| cggtgcgtga | ttgaagacaa | ttttttctacg | ccccctttta | agctcatggc | gcccttttac | 120 |
| cctaaagacg | atttagcgga | aatcatgctt | ttagcggtaa | gccctggcat | gatgaggggc | 180 |
| gatgcgcaag | atgtgcaatt | aaacatcggt | ccaaattgca | agttaaagat | cacttcgcaa | 240 |
| tcctttgaaa | aatccataa | cactgaagat | gggtttgcc | gcagagacat | gcatattgtt | 300 |
| gtgggggaaa | acgctttttt | agatttttgcg | cttttccgct | taatccctt | tgaaaacgcg | 360 |
| cattttaag | gcaacaccac | gatttctttg | cgcttagct | ctcaattgct | ctatatgaa | 420 |
| atcattgtcg | cagggcgagt | ggcgcgcaat | gagttgttta | aattcaaccg | cttgacacc | 480 |
| aaaatctcta | ttttacaaga | tgagaaaccc | atctattatg | acaacacgat | tttagatccc | 540 |
| aaaaccaccg | acttaaataa | catgtgcatg | tttgatggct | atacgcat | tttgattttg | 600 |
| gtgcttgc | attgccccat | agagctctct | ggtgtgcgag | aatgcattga | agaaagcgaa | 660 |
| gggggtgtag | gggcatgtg | tgaaacccg | gttctcatt | tatgcgtgaa | agcttttagc | 720 |
| aaaggctcag | aacccttatt | gcatttaaga | gaaaaaatcg | ctcgcttggt | tacgcaaac | 780 |
| accacgcaaa | aggtt | | | | | 795 |

Seq ID 6

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgaaaaaga | ttagcagaaa | agaatatgtt | tctatgtatg | gccctactac | aggcgataaa | 60 |
| gtgagattgg | gcgatacaga | cttgatcgct | gaagtagaac | atgactacac | cattttatggc | 120 |
| gaagagctta | aattcggtgg | cggtaaaacc | ctgagagaag | gcatgagcca | atccaacaac | 180 |
| cctagcaaaag | aagaattgga | tctaatacatc | actaacgctt | taatcgtgga | ttacaccggg | 240 |
| atttataaag | cggatattgg | tattaaagat | ggcaaaatcg | ctggcattgg | ttaaaggcgg | 300 |
| aacaaagaca | tgcaagatgg | cgttaaaaaac | aatcttagcg | taggtcctgc | tactgaagcc | 360 |
| ttagccgggtg | aaggtttgat | cgtaactgct | ggtggtattg | acacacacat | ccacttcatt | 420 |
| tcaccccaac | aaatccctac | agctttttgca | agcgggtgtaa | caaccatgat | tgggtggcgga | 480 |
| actggtcctg | ctgatggcac | taatgcgact | actatcactc | caggcagaag | aaatttaaaa | 540 |
| tggatgctca | gagcggctga | agaatattct | atgaacttag | gtttcttggc | taaaggtaac | 600 |
| gcttctaacg | acgcgagctt | agccgatcaa | attgaagctg | gtgcgattgg | ctttaaaatc | 660 |
| cacgaagact | ggggcaccac | tccttctgca | atcaatcatg | cgtagatgt | tcgagacaaa | 720 |
| tacgatgtgc | aagtcgctat | ccacacagac | actttgaatg | aagccgggtg | cgtggaagac | 780 |
| actatggcag | ctattgccgg | acgcactatg | cacactttcc | acactgaagg | tgctggcggc | 840 |
| ggacacgctc | ctgatattat | taaagtagct | ggtgaacaca | acattcttcc | cgcttccact | 900 |
| aaccccaacta | tccttttcac | tgtgaataca | gaagcagaac | acatggacat | gcttatgggtg | 960 |
| tgccaccact | tggataaaaag | cattaaagaa | gatgttcagt | tcgctgattc | aaggatccgc | 1020 |
| cctcaaacca | ttgcggtgta | agacactttg | catgacatgg | ggattttctc | aatcaccagc | 1080 |
| tctgactctc | aagctatggg | tcgtgtgggt | gaagttatca | ctagaacttg | gcaaacagct | 1140 |
| gacaaaaaca | aaaaagaatt | tggccgcttg | aaagaagaaa | aaggcgataa | cgacaacttc | 1200 |
| aggatcaaac | gctacttgct | taaatacacc | attaaccag | cgatcgctca | tgggattagc | 1260 |
| gagtatgtag | gttctgtaga | agtgggcaaa | gtggctgact | tggatttggtg | gagtcgccga | 1320 |
| ttctttggcg | taaaacccaa | catgatcatc | aaaggcgggt | tcattgctgt | gagtcaaatg | 1380 |
| ggtgacgcga | acgcttctat | ccctacccca | caaccagttt | attacagaga | aatgttcgct | 1440 |
| catcatggta | aagccaaata | cgatgcaaac | atcacttttg | tgtctcaagc | ggcttatgac | 1500 |
| aaaggcatta | aagaagaatt | agggcttgaa | agacaagtgt | tgccggtaaa | aaattgcaga | 1560 |
| aacatcacta | aaaaagacat | gcaattcaac | gacactaccg | ctcacattga | agtcaatcct | 1620 |
| gaaacttacc | atgtgttcgt | ggatggcaaa | gaagtaactt | ctaaaccagc | caataaagtg | 1680 |
| agcttggcgc | aactccttag | catttttc | | | | 1707 |

Seq ID 7

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgaaaaaga | ttagcagaaa | agaatatgtt | tctatgtatg | gccctactac | aggcgataaa | 60 |
| gtgagattgg | gcgatacaga | cttgatcgct | gaagtagaac | atgactacac | cattttatggc | 120 |
| gaagagctta | aattcggtgg | cggtaaaacc | ctgagagaag | gcatgagcca | atccaacaac | 180 |
| cctagcaaaag | aagaattgga | tctaatacatc | actaacgctt | taatcgtgga | ttacaccggg | 240 |
| atttataaag | cggatattgg | tattaaagat | ggcaaaatcg | ctggcattgg | ttaaaggcgg | 300 |
| aacaaagaca | tgcaagatgg | cgttaaaaaac | aatcttagcg | taggtcctgc | tactgaagcc | 360 |
| ttagccgggtg | aaggtttgat | cgtaactgct | ggtggtattg | acacacacat | ccacttcatt | 420 |
| tcaccccaac | aaatccctac | agctttttgca | agcgggtgtaa | caaccatgat | tgggtggcgga | 480 |
| actggtcctg | ctgatggcac | taatgcgact | actatcactc | caggcagaag | aaatttaaaa | 540 |
| tggatgctca | gagcggctga | agaatattct | atgaacttag | gtttcttggc | taaaggtaac | 600 |
| gcttctaacg | acgcgagctt | agccgatcaa | attgaagctg | gtgcgattgg | ctttaaaatc | 660 |
| cacgaagact | ggggcaccac | tccttctgca | atcaatcatg | cgtagatgt | tcgagacaaa | 720 |
| tacgatgtgc | aagtcgctat | ccacacagac | actttgaatg | aagccgggtg | cgtggaagac | 780 |
| actatggcag | ctattgccgg | acgcactatg | cacactttcc | acactgaagg | tgctggcggc | 840 |
| ggacacgctc | ctgatattat | taaagtagct | ggtgaacaca | acattcttcc | cgcttccact | 900 |
| aaccccaacta | tccttttcac | tgtgaataca | gaagcagaac | acatggacat | gcttatgggtg | 960 |
| tgccaccact | tggataaaaag | cattaaagaa | gatgttcagt | tcgctgattc | aaggatccgc | 1020 |
| cctcaaacca | ttgcggtgta | agacactttg | catgacatgg | ggattttctc | aatcaccagc | 1080 |
| tctgactctc | aagctatggg | tcgtgtgggt | gaagttatca | ctagaacttg | gcaaacagct | 1140 |
| gacaaaaaca | aaaaagaatt | tggccgcttg | aaagaagaaa | aaggcgataa | cgacaacttc | 1200 |
| aggatcaaac | gctacttgct | taaatacacc | attaaccag | cgatcgctca | tgggattagc | 1260 |
| gagtatgtag | gttctgtaga | agtgggcaaa | gtggctgact | tggatttggtg | gagtcgccga | 1320 |
| ttctttggcg | taaaacccaa | catgatcatc | aaaggcgggt | tcattgctgt | gagtcaaatg | 1380 |
| ggtgacgcga | acgcttctat | ccctacccca | caaccagttt | attacagaga | aatgttcgct | 1440 |
| catcatggta | aagccaaata | cgatgcaaac | atcacttttg | tgtctcaagc | ggcttatgac | 1500 |
| aaaggcatta | aagaagaatt | agggcttgaa | agacaagtgt | tgccggtaaa | aaattgcaga | 1560 |
| aacatcacta | aaaaagacat | gcaattcaac | gacactaccg | ctcacattga | agtcaatcct | 1620 |
| gaaacttacc | atgtgttcgt | ggatggcaaa | gaagtaactt | ctaaaccagc | caataaagtg | 1680 |
| agcttggcgc | aactccttag | catttttc | | | | 1707 |

Seq ID 8

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| atgcggttatt | ttctttagt | tttcttgtt | ttgtttgtg | gttgacacaa | aaaggatttc | 60 |
| acgtcctaaag | atcttctct | gccccaaag | gcttcaagct | atcttgcag | ctctcaaaat | 120 |
| ggcagtaaca | acaaccacaa | cattgacccc | caagcgtaa | gagaaaatct | gaaagagagc | 180 |
| tatctcaaa | cgtgggtatt | cccatggcta | gatatgaaag | tcaaaagcaa | taaaaaagaa | 240 |
| gtgttttgg | tccttaagga | gatgaataaa | tccaccgggt | atggcgagaa | tctaaaaccc | 300 |
| aacgcaaaag | ctttcaatga | cgcactcatt | aagagcatgg | atattgagca | ttaccctagc | 360 |

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| gttaagatta | gggctgttgt | agcgcgagat | agcgatgtga | gggctgtgcc | tactaacaaa | 420 |
| ccttattatc | tttctcaaaa | aggctatcct | tttgataggt | atcaaaattc | gctgattttt | 480 |
| caaggcacgc | cggttttaat | cacgcatttt | aatctagata | aaacttatgc | ccacattcaa | 540 |
| agcagttttg | tttatggctg | gatcaaagtt | agcgattttag | tctacatgca | cgataaagac | 600 |
| atagagcttt | taacccatct | ttaaagattat | gtcatgccta | taaaagataa | aatccccctt | 660 |
| tatacagact | atgggggattt | ttacaccaac | gccagagtgg | gcgaattggt | cgctctcatc | 720 |
| ccccaaagtc | aaaaaacacc | tcaaaaaccc | caaaaaaagg | aattgaaagc | ctatggtttt | 780 |
| ttgagagacg | ctaagggtta | tgcagcttta | caaagcgtga | tcttagaaga | aaaggatttt | 840 |
| tttgtttttc | ctaaggcttt | taacagcgag | aacatggcgt | attttataga | caccatgtta | 900 |
| gggcaaaaat | acggctgggg | cgggctattg | ggtaattagg | attgctcggc | tttcaccaga | 960 |
| gatagttttg | ctaatttttg | tattttgctc | cccagaaatt | cctatgcgca | aagccgttat | 1020 |
| gcgaacaatt | atgtggattt | aagctctatg | aaagccaaag | aaaaagaaga | ctacatcctt | 1080 |
| aaaaacgcca | cgccttttgg | aacgctcatc | tatttaaaag | ggcatatcat | gctttattta | 1140 |
| ggcgcacaca | accatcaagc | gatagtcgct | cacagcattt | ggtcgggtga | aacccaaaag | 1200 |
| catttttaaaa | ccttgagcca | taaaatagga | ggcgtggtga | tcacttcggt | atgggttagct | 1260 |
| gaagagcata | atggggcggt | ttctaaaaag | aaattattga | ttgatagggt | gcttggaatg | 1320 |
| agcgatttga | aagattttgt | caataaaaact | tcaagccctt | taaatgcgaa | t | 1371 |

Seq ID 9

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgaaaaaga | aagctaacga | agaaaaagcc | caaaaaagag | ctaaaacaga | agccaaagca | 60 |
| gaagccacac | aagaaaataa | aactaaagaa | aacaataaag | ccaaagaaag | caaaattaaa | 120 |
| gaaagcaaaa | tcaaagaagc | taaagcgaaa | gaacctattc | ctgttaaaaa | gcttagtttt | 180 |
| aatgaagcgt | tagaagaatt | gttcgcataat | tccttaagcg | attgctgttc | ttatgagtcc | 240 |
| atcatctcaa | tcagcgcgaa | agtcgccact | ctagcccaaa | tcaaaaaaat | caaagaattg | 300 |
| tgccaaaaat | accaaaagaa | attagtccagc | tcttcagaat | acgctaaaaa | actcaatgcg | 360 |
| attgacaaga | ttaaaaaaac | cgaagaaaag | caaaaagttt | tagatgaaga | attagaagat | 420 |
| ggctatgact | ttttgaaaga | aaaggatttt | ttagagtggg | gcagaagcga | tagcccagtg | 480 |
| cgcattgtatt | tgcgcgaaat | gggggatata | aaacttttaa | gcaaagatga | agagattgaa | 540 |
| ttgagcaagc | aaatccgctt | gggtgaagac | attatttttag | acgcgatctg | ctcgggtgccg | 600 |
| tatttgattg | attttatcta | tgcgtataaa | gacgctttaa | tcaatcgtga | aagaagggtt | 660 |
| aaagagcttt | tcaggagctt | tgatgatgac | gatgaaaata | gcgtgagcga | ttctaaaaaa | 720 |
| gatgaagaca | acgaagaaga | tgaagaaaac | gaagaaaagg | aaaaagtcgt | ttctgaaaaa | 780 |
| gacaagaagc | gtgtgaaaaa | ggttcaagaa | agcttttaag | ccctagacaa | ggctaaaaaa | 840 |
| gaatggctta | aagcccttga | agcccccata | gatgaaagag | aagacgaatt | ggtgcgttca | 900 |
| ttgaccctag | cttacaaaacg | ccaaacactc | aaagacagac | tctatgattt | agaacctacc | 960 |
| agcaaaactga | ttaatgaatt | agtcaaaacg | atggaaacca | ctttaaaaag | cggcgatggg | 1020 |
| tttgaaaaag | agttgaaacg | cttggaatac | aaactgccct | tattcaatga | cactctcatc | 1080 |
| gcaaaccata | aaaaaatcct | tgccaatatc | actaacatga | ctaaagaaga | tattatcgct | 1140 |
| caagtgcacg | aagcgactat | ggtgagcgtg | tatatggatc | ttaaaaagct | ttttttgact | 1200 |
| aaagaagcga | cgaagaagg | ctttgatcta | gcccccaaca | agctaaaaga | aatttttagag | 1260 |
| caaatcaaaa | gaggggaagt | gatttccgat | cgcgctaaaa | acaaaatggc | taaatccaat | 1320 |
| ttaaggttgg | tggtgagcat | cgctaaacga | ttcacgagca | gaggcttacc | attcttggtg | 1380 |
| ttgattcaag | agggcfaat | tggtttgatg | aaagcgggtg | ataagtttga | gcatgaaaag | 1440 |
| ggcttcaagt | ttctaccta | tgcgacctgg | tggatcaaac | aagctatcag | cagagccata | 1500 |
| gccgatcagg | ccgcactat | ccgcactccc | attcacatga | ttgatacgat | taatcgcctc | 1560 |
| aataaagtca | tgcgcaaaac | cattcaagaa | aacggcaag | agcctgattt | agaagtgggtg | 1620 |
| gctgaagaag | tggggctttc | gttagataaaa | gtgaagaatg | tgattaaggt | gactaaagag | 1680 |
| cctatcagtt | tggaaacccc | agtcggcaat | gatgatgatg | gcaagtttgg | ggatttcgtg | 1740 |
| gaagataaga | atatcgtcag | ctccattgat | cacatcatgc | gagaagattt | gaaagcaaaa | 1800 |
| attgaaaagc | ttttggatca | gttgaatgag | cgagaaaaag | cgggtgatccg | catgctgttt | 1860 |
| gggcttttag | acgatgaaag | cgatcgaaact | ttagaagaaa | ttggcaagga | attgaatggt | 1920 |
| actagagaaa | gggtgcgcca | gattgaaagc | tctgcgatta | aaaaattgag | aagcccgag | 1980 |
| tacgggcgca | ttttaagaaa | ctatttgcgc | att | | | 2013 |

Seq ID 10

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-----|
| atggtgcaaa | aaattggcat | tttaggggag | atgagagaag | aaataacccc | tatactagaa | 60 |
| ttgtttggcg | tggattttga | agagatccct | ttagggggga | atgtcttcca | taaaggcggt | 120 |
| tatcacaaca | aggaaatcat | tgtcgtttat | agcaagattg | gcaaggtgca | ttccacttta | 180 |
| accacaacga | gcatgatttt | agcgtttggc | gttcaaaagg | tgttttttag | cggggtggct | 240 |
| ggaagccttag | ttaaagattt | aaaaatcaat | gttttactag | tggctattca | attagtccag | 300 |
| catgatgtgg | atttgagcgc | gtttgatcac | cctttagggt | tcattcccaga | aagcgcgatt | 360 |
| tttattgaaa | cgagcgaaaag | tttgaaacgt | ttggctaaag | aagtcgctaa | tgaacagcat | 420 |
| atcgtgctca | aagaaggcgt | catcgcacat | ggcgatcagt | ttgtgcatag | caaagaaaag | 480 |
| aaagagtttt | tagttagcga | gtttaaagcg | agcgcgggtg | aaatggaggg | ggcgagcgtg | 540 |
| cgttttgtgt | gccaaaaatt | ttggcgtgcca | tgtgtgtgt | taaggagcat | tagcgataac | 600 |
| gctgatgagg | aagctaacat | gagctttgat | gcgttttttag | aaaaaagcgc | tcaaaacttca | 660 |
| gcgaatttct | taaaaagcat | ggtggatgag | ctt | | | 693 |

Seq ID 11

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| atgagttttta | ggataaatac | caatatcgcc | gctttaactt | ctcatgcggt | aggggttcaa | 60 |
| aacaacagag | acctttcaag | ctcgcttgaa | aagttaagct | cagggcttag | gatcaataaa | 120 |
| gccgctgacg | attctagtgg | gatggcgatc | gctgatagct | taaggagtca | aagcgcgaat | 180 |
| ttgggtcaa | cgatccgcaa | cgccaatgac | gctattggta | tggttcaaac | cgcagataaa | 240 |
| gcgatggatg | agcaaatcaa | aatcttagac | accattaaaa | ccaaagccgt | tcaagccgct | 300 |
| caagatgggc | aaactttaga | aagccgaaga | gcgctccaga | gcgatattca | aaggttggtta | 360 |
| gaagaactgg | acaatatcgc | taacaccaca | agctttaacg | gccaacaaat | gctttcagga | 420 |
| agtttttcta | acaaagaatt | tcaaattggc | gcgtattcta | acgccacggt | taaagcgtct | 480 |
| attggctcaa | cgagctcaga | taagattggg | catgtgcgca | tggaaacttc | ttcttttagc | 540 |
| ggtgcaggca | tgctcgctag | cgcgccggca | caaaacttga | ctgaagtggg | attgaatttc | 600 |
| aaacaagtca | atggcgtgaa | tgattataag | attgaaaccg | tgcgcatttc | tacgagtgtt | 660 |
| ggcactggga | ttggagcggt | aagcgaaatc | atcaatcggt | tttctaacac | tttaggcgtt | 720 |
| agggcttctt | ataatgtcat | ggctaccggc | ggcactcccg | tgcaatcagg | aactgttagg | 780 |
| gagctttacca | ttaatggcgt | agaaattggg | accgtgaatg | atgtgcataa | aaacgcgct | 840 |
| gatgggagat | tgactaatgc | aatcaactcc | gtcaaagaca | ggacgggtgt | ggaagcgagc | 900 |
| ttggatatct | aagggcgcat | taattttacac | tccattgacg | ggcgcgcgat | ttctgtgcat | 960 |
| gcagcgagcg | cgagcggtca | ggtttttggg | ggaggggaat | ttgcagggat | ttctgggaca | 1020 |
| cagcatgctg | ttattgggcg | cttaaccctg | accagaaccg | acgctagaga | catcattgtg | 1080 |
| agcgtgtgta | atttcagcca | tgtgggcttt | cattccgctc | aaggggtggc | agaatacacc | 1140 |
| gtgaatttga | gagcgggttag | gggcattttt | gatgcgaatg | tggcttcagc | agccggagcg | 1200 |
| aacgctaatt | gcgcgcaagc | ggagaccaat | tctcaaggta | taggggctgg | ggttaacaagc | 1260 |
| cttaaaagggg | cgatgattgt | gatggatatg | gcagattcag | cgcgcacgca | attggacaag | 1320 |
| atccgctcgg | atatgggttc | ggtgcaaatg | gaattgggtta | caaccattaa | taattttctt | 1380 |
| gtaacccaag | tgaatgttaa | agcggctgaa | tctcaaatca | gagatgtgga | ttttgtgtaa | 1440 |
| gagagcgcg | acttttctaa | atacaatatt | ttggcgcaaa | gcgggagttt | tgctatggcg | 1500 |
| caagcgaatg | cggtgcaaca | aatgtgtcta | aggctttttac | aa | | 1542 |

Seq ID 12

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|-----|
| atgaaaaaaa | atatcttaaa | tttagcggtta | gtgggtgcgt | tgagcacgtc | gtttttgatg | 60 |
| gctaagccgg | ctcataacgc | aaataacgct | acgcataaca | cgaaaaaac | gactgattct | 120 |
| tcagcaggcg | tgtagcgac | agtggatggc | agacctatca | ctaaaagcga | ttttgacatg | 180 |
| attaagcaac | gaaatcctaa | ttttgatattt | gacaagctta | aagagaaaga | aaaagaagcc | 240 |
| ttgattgatc | aagctattcg | caccgccctt | gtagaaaatg | aagctaaaac | cgagaaattg | 300 |
| gacgacactc | cagaatttaa | agcgatgatg | gaagcggtta | aaaaacaggc | tttagtggaa | 360 |
| ttttgggcta | aaaaacaggc | tgaagaagtg | aaaaaagtcc | aaatcccaga | aaaagaatg | 420 |
| caagattttt | acaacgctaa | caaagatcag | ctttttgtca | agcaagaagc | ccatgctagg | 480 |
| catatttttag | tgaaaaccga | agatgaggct | aaacggatta | tttctgagat | tgacaaacag | 540 |
| ccaaaggcta | aaaaagaagc | taaattcatt | gagttagcca | atcgggatac | gattgatcct | 600 |
| aacagcaaga | acgcgcacaa | tggcggtgat | ttggggaaat | tccaaaagaa | ccaaatggct | 660 |
| ccggattttt | ctaaagccgc | tttcgcttta | actcctgggg | attacactaa | aaccctgtgt | 720 |
| aaaacagagt | ttggttatca | tattatctat | ttgatttcta | aagatagccc | tgtaacttat | 780 |
| acttatgaac | aggctaacc | taccattaag | gggatgttac | aagaaaagct | tttccaagaa | 840 |
| cgcataaatc | aacgcattga | ggaactaaga | aagcacgcta | aaattgttat | caacaag | 897 |

Seq ID 13

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|------------|------|
| gtgcgatata | tcaagttttt | caaagagttg | aacaataaaa | atgtgaatct | ggttgggggc | 60 |
| aagaacgcta | gtattggtga | aatgtttcaa | gaattagtgc | ctattggtat | taaagtgcct | 120 |
| gatggctttg | cgatcaccag | cgaagcgtat | tggtatcttt | tagagcaagg | aggggctaaa | 180 |
| caaaaaatca | tagagctttt | agaaaaatgt | gatgccaccg | aaattgatgt | gttaaaaatc | 240 |
| cgctccaaac | aaatcagaga | gcttattttt | ggcacgcctt | ttcctagcga | tttgagagat | 300 |
| gagatttttc | aagcttatga | gatttttaagc | cagcaatacc | acatgaaaga | agccgatgtg | 360 |
| gctgtaagga | gttcgcgtac | tgcagaagat | ttgccggacg | cttcttttgc | cgggcagcaa | 420 |
| gacacttatt | taaaccattaa | gggtaaaacc | gaattgatcc | actatatcaa | atcctgttta | 480 |
| gcgtcgcttt | ttaccgatag | agcgatttagc | tatagggcga | gtcgtgggtt | tgatcattta | 540 |
| aaagtgcgcg | tcagcgtggg | ggtgcaaaaa | atggtgcgag | cggataaagg | cagcgcgggc | 600 |
| gtgatgtttt | ctattgacac | cgaaaccggg | tttaagagacg | cgggtgtttat | cacttcagcg | 660 |
| tgggggttag | gcgaaaatgt | ggtgggtggc | acgataaaac | ctgatgaatt | ttatgtgttt | 720 |
| aagcccactt | tagagcaaaa | caaacgcgcc | attatcaaac | gccaaactcg | caataaaacg | 780 |
| caaaaaatgg | ttctatgccc | aaggggttagc | gaacacccca | ccagaaacat | taaaaccacc | 840 |
| aaaaaagaat | ggcaatcctt | ttcattgagc | gatgaagacg | tgctgatttt | agccaaatac | 900 |
| gccattgaaa | ttgaaaaaca | ctactctaaa | gaagccaaac | aataccgccc | tatggatata | 960 |
| gaatgggcta | aagatggcga | gagcggggaa | atcttttatcg | ttcaagcgcg | cccagaaacc | 1020 |
| gttcaaagcc | agaaaagtaa | agaagaaagt | caagtctttg | aaaaattcaa | attcaaaaac | 1080 |
| cctaaccgaaa | agaaagagat | tatottacaa | ggcagagcga | ttgggagtaa | aattggctca | 1140 |
| ggaaaagtgc | gcatcatcaa | tgatttggag | cacatgaatt | cttttaaaga | gggcgaaatt | 1200 |
| ttagttacgg | ataacaccga | tccggactgg | gagccttgca | tgaaaaaagc | gagcgcggtt | 1260 |
| atcactaatc | gtggagggcg | cacttgccat | gccgctattg | tggcgagaga | aattggcgtg | 1320 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| ccagctatcg | ttggggtgag | cggggcgact | gatagccttt | ataccggcat | ggaaatcacg | 1380 |
| gtttcttgcg | ctgagggcgga | agagggtcat | gtgtatgcgg | gcatttatga | gcatgaaatt | 1440 |
| gaaaggggtg | agcttttctaa | catgcaagaa | actcaaaaca | aaattttacat | caatatttga | 1500 |
| aaccttgaaa | aagccttttg | cttttctcaa | ctccctaata | acggcgtagg | gctagccagg | 1560 |
| atggaaatga | ttatttttaaa | tcaaatcaaa | gccaccctt | tagctttagt | ggatttgac | 1620 |
| cacaaaaaaa | gcgtgaaaga | aaaaaatgaa | attgaaaacc | tcatggcagg | ctatgctaac | 1680 |
| cctaaagatt | tttttgtgaa | aaaaatcgct | gaaggcattg | gcatgatcag | tgcagcgttt | 1740 |
| taccctaaac | ctgtcattgt | gagaacgagc | gatttcaaat | ccaatgaata | catgcgcatg | 1800 |
| cttggcggtc | ctagctatga | gcctaatagaa | gaaaacccca | tgcttggcta | taggggggct | 1860 |
| agtcggtatt | attcagagag | ctataatgaa | gcgttttcgt | gggagtgtga | agccttagcg | 1920 |
| ttagttaggg | aagaaatggg | attaaccaac | atgaaagtga | tgatcccttt | tttgcaacc | 1980 |
| attgaagagg | gtaaaaaagt | cctagaaatc | ttaagaaaaa | acaattttaga | atccggtaaa | 2040 |
| aacgggcttg | aaattttatat | catgtgcgaa | ttgccggtga | atgtcatttt | ggctgatgat | 2100 |
| ttcttgagct | tgtttgatgg | cttttctatt | ggatcaaacg | atttaaccca | gctcacttta | 2160 |
| ggcgtggata | gagacagcga | attggtcagc | catgtctttg | atgaaaggaa | tgaagcgatg | 2220 |
| ctaaagatgt | ttaaaaaagc | gattgaagct | tgcaaaaaggc | acaacaaata | ttgctgggatt | 2280 |
| tgctgggcaag | ccccaaagcga | ttaccctgaa | gtaacagagt | ttttagtcaa | agagggcatc | 2340 |
| acttccattt | cttttaaaccc | tgatagcggtg | atccccactt | ggaacgctgt | agccaagtta | 2400 |
| gaaaaagaac | taaaaagaaca | tggcttaact | gaacat | | | 2436 |

Seq ID 14

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|------|
| atgagtgcgg | aactgattgc | tgtttataaa | gacgagcaaa | taatagattt | agagagcgcg | 60 |
| aaagtcttag | ggctgagcga | tgggattaaa | gcgttaaaccg | ggacagagcc | gatatatattt | 120 |
| gatgattcgc | cttttggctt | agagggtgatt | agggcttcatt | gcgcgcattt | gcttgcgcaa | 180 |
| agcttgaaag | cccttttatcc | ggacgcgaaa | ttttttgtag | gccctgtggt | agaagagggg | 240 |
| ttttattacg | atttcaagac | ttcttcaaaa | atcagcgaag | aggatttgcc | taaaattgaa | 300 |
| gcgaaaatga | aagagtttgc | gaagttgaaa | ctcgctatca | ctaaagagac | tttaaccaga | 360 |
| gagcaagctt | tggagcggtt | taaggcgat | gaattaaagc | atgcggtgat | gagtaaaatc | 420 |
| ggtggcggtc | cctttggcgt | gtatcaacaa | ggcgagtttg | aagattttgtg | taaggggccc | 480 |
| catctcccaa | acaccggtt | tttaaacctt | ctaaactggc | tggggcttat | tggggcttat | 540 |
| ttgggcgggc | atgaaaacaa | tgaatgctc | attagaatct | atggaatcgc | ttttgccacc | 600 |
| aaagaggggt | taaaagacta | tcttttccaa | atagaagaag | cgaaaaaacg | agatcacaga | 660 |
| aagctaggcg | tggagctagg | gcttttttagc | tttgatgatg | agataggggc | gggcttacct | 720 |
| ttatggctgc | ctaaaagggc | aaggcttagg | aagcgcttg | aagattttatt | gagtcaagcg | 780 |
| ttacttttaa | gaggctatga | gccggttaaa | ggctctgaga | ttttaaagag | cgatgtgtgg | 840 |
| aaaatcagcg | ggcattatga | caactataaa | gaaaacatgt | atttcaccac | gattgatgag | 900 |
| caagaatatg | gcataaagcc | tatgaactgc | gtggggcata | ttaaagtcta | tcaaagcgct | 960 |
| ttgcacagct | acagagattt | gcccttaagg | ttttatgaat | acggcggtgt | gcatcggtat | 1020 |
| gaaaaaagcg | gcgtgttgca | tgggctttta | aggggttagg | aatttaccga | agatgatgca | 1080 |
| catatttttt | gctcttttga | acagatccaa | agcgaagtga | gcgcgatttt | agatttttacg | 1140 |
| cacaaaatca | tgcaagcggt | tgatttttagc | tatgaaatgg | aattatccac | aaggccggct | 1200 |
| aaatccatag | gcgatgataa | agtttgggaa | aaggccacta | acgcttttaa | agaagcctta | 1260 |
| aaagaacacc | gcattgatta | caagattgat | gaagggggag | gggcttttcta | tgggcctaag | 1320 |
| attgacatta | aaatcactga | cgcttttaag | cgttaaatggc | agtgtggcac | gattcaagtg | 1380 |
| gatatgaatt | tgctgaacg | cctcaagctc | gctttcacta | atgagtataa | tcacgctgag | 1440 |
| cagccggtga | tgatccacag | agcgatttta | ggctcgtttg | aaagggtttat | tgcgattttg | 1500 |
| agcgaacatt | ttggggggaa | tttccctttc | tttgtcgctc | ccactcaaat | cgctctcatc | 1560 |
| cctattaatg | aagagcatca | tgtttttgct | ttgaaattaa | aagaggcgct | aaaaaagcgc | 1620 |
| gatatttttg | tagaagtgtt | agataaaaaa | gacagcttga | ataaaaagggt | gcgattagcc | 1680 |
| gaaaagcaaa | aaatccctat | gatttttagtg | ttagggaaatg | aagaagtggg | gaccgaaatt | 1740 |
| ttatccatta | gagacagaga | aaaacaagat | caatataaaa | tgcccttaaa | ggagttttta | 1800 |
| aacatgggtg | aatctaagat | gcaagaggtt | agtttt | | | 1836 |

Seq ID 15

| | | | | | | |
|-------------|------------|------------|------------|-------------|------------|-----|
| gtgaaacgga | ttttattttt | tttagtagct | acgacttttt | tgttgagagc | agaaacggat | 60 |
| tctgccacta | ttaacactac | agttgatccc | aatgttatgt | tttctgaaag | ctccacaggg | 120 |
| aatgtgaaaa | aagaccgcaa | gagggtttta | aagagcatgg | ttaattttgga | aaaagagcgc | 180 |
| gtgaagaatt | ttaaccggta | ttctgaaacc | aagatgagta | agggcgactt | atccgctttt | 240 |
| ggagctttct | ttaaggggag | tttggaaagt | tgtgtggatc | aaaagatttg | ttattatgag | 300 |
| cataaagatg | gcaagggttc | ttttgtggtg | aatgacaggg | agaagtttta | taaaactgtg | 360 |
| cttaaaagact | tagggacaga | gctttcgctc | cctttgttta | actggcttta | caaaggctcg | 420 |
| gattttgggg | ctttgcatga | gcagtttggg | gatatgtatg | atgggtatat | caaatacttg | 480 |
| atcagtatgg | ttagaataag | ccaaaaagaa | aaggctagaa | aagtggatgc | aatcgttctt | 540 |
| aagaaaatgg | aagaacaagc | tgagaaagac | actaaggcag | cgtttcaaaa | gaggagcagt | 600 |
| gggagccttg | aaagccatc | tgatagccct | gaatttataa | gctcttctaa | gaggacacag | 660 |
| aacgcttcta | attcggatct | caattctatg | accaatgcta | acgcgctcaa | agaaacagct | 720 |
| tcaaaagagc | cagaggcttc | ttcaaaaaaa | gagaaaaagt | ctaagaaaaa | acgtcgctt | 780 |
| tcaaaagaa | aaaaacaaca | acaagccttg | caacaagagt | ttgaaaaaca | aattagcgac | 840 |

tctagtaagt ctgaaaaa

858

Seq ID 16

| | | | | | | |
|------------|-------------|-------------|------------|------------|-------------|-----|
| atgaaagaaa | aaaacttttg | gccttttaggg | atcatgagcg | tgctcattct | tggtgcttggg | 60 |
| atcggtggtg | ttttggtggg | gtttgcccta | aaaaattcgc | ctaaaaacga | tttagtgtat | 120 |
| tttaagggcc | ataacgaagt | ggattttaa | tttaacgcta | tgcttaaaac | ctatgaaaac | 180 |
| tttaaatcca | attatcgttt | tttggtgggt | ttaaagcccc | ttattaaaag | ccctaaaaac | 240 |
| cccattttgc | cctatttttc | ttaaaggcacg | catggggata | aaaaactcca | agaaaacctt | 300 |
| ttaaacaacg | ctttgatttt | ggaaaaatcc | aacacgcctt | atgcgcaatt | gcaaccgcct | 360 |
| aaacccgcct | tagattcgcc | aaacattcaa | gtgtattttg | cgttttatcc | cagtcctatca | 420 |
| cagcccgatg | ggtttaggaac | gcttgattgt | aaaaacgcat | gcgagccttt | aaaatttgat | 480 |
| ttgttagaga | gcgacaaaat | ggggcggtat | aagatccttt | ttaaatttgt | ttttaaaaat | 540 |
| aaagaagaat | tgatttttaga | acaactggct | tttttcaagc | aacgcatt | | 588 |

Seq ID 17

| | | | | | | |
|-------------|-------------|------------|-------------|------------|-------------|------|
| atggcggtatt | ttttagaaca | aacggatagt | gaaatttttg | agcttatctt | tgaagaatac | 60 |
| aagcggcaaa | atgagcattt | agaaatgata | gcgagcgaga | attacacttt | tgcaagcggt | 120 |
| atggaggcta | tggtggagtgt | tttaacgaat | aaatcgctg | aaggctaccc | taacaagcgc | 180 |
| tattatggag | gctgtgaagt | ggtggataaa | atagaaagcc | tagccataga | aagggtctaaa | 240 |
| aagcttttta | attgcccagtt | cgctaacgtg | caagcgcat | caggctcaca | agccaataac | 300 |
| gctgtctatc | acgctctttt | aaagccttat | gacaagattt | taggcatgga | tttaagctgt | 360 |
| ggagggcatt | taacgcattg | cgctaaagtg | agtttaaccg | gcaagcatta | tcagagcctt | 420 |
| tcttatggcg | tgaatttgga | tggctatatt | gattatgaag | aggcgctaaa | aatcgctcaa | 480 |
| agcgtaagc | cagaaatcat | cggtgctggg | ttttcagcct | atccaaggga | gattgatttt | 540 |
| aagaaattta | gagaaatcgc | tgatgaagtg | ggggcggtac | tattaggcga | tatagcccat | 600 |
| gtggcagggc | ttgtggtaac | cggtgagcat | gcccacctt | tcccgcttg | ccatgtgggt | 660 |
| tcaagcacca | ctcataagac | cttaagaggg | cctagagggg | ggattatttt | aactaatgat | 720 |
| gaagagatag | cggctaagat | tgacaaagcg | atttttccag | gaactcaagg | cgggcctttg | 780 |
| atgcattgtg | ttgctgctaa | agcgggtggg | tttaagaga | atctaaaacc | agaattttaa | 840 |
| gcttatgcac | aattagtga | atctaaccat | caagtttttg | ctaaagcggt | aaaagaaaaa | 900 |
| aaccataagt | tagtgagtgg | tggcacttct | aaccatttgc | ttttaatgga | tttttttagat | 960 |
| aagccttata | gcgggaaaga | cgctgatatt | gcattagggg | atgccggaat | caccgtgaat | 1020 |
| aaaaacacca | ttcctgggtg | aacgcgcagc | ccttttgtta | cgagcgggat | aaggattggc | 1080 |
| tcagcggcat | tgagcgcaag | gggcattggg | gctaagggaat | ttgaaatcat | aggggaataa | 1140 |
| atatcagata | ttttgaatga | tattaataat | gttagtttgc | aattgcatgt | gaaagaagaa | 1200 |
| ttgaaagcca | tgggtcaatca | attcctctgt | taccaccaac | ctattttt | | 1248 |

Seq ID 18

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgaaaataa | catattgtga | tgcgctaatt | attggaggcg | gactagctgg | gttaagggct | 60 |
| agtatcgcat | gcaaaacaaa | gggttttaac | accatcgttt | taagcctagt | gcctgtcagg | 120 |
| cgttcgcact | ctgcagccgc | tcaagggggc | atgcaagcga | gccttgcgaa | cgctaaaaaa | 180 |
| agcgagggcg | ataatgaaga | tttacacttt | ttagacacgg | ttaaagggag | cgattggggg | 240 |
| tgcgatcagc | aagtggctag | gatgtttgta | accactgctc | ctaaagccat | taggggaattg | 300 |
| gccagttggg | gggtgccttg | gactaggatt | aaaaagggcg | ataggcctgc | ggtcgctaat | 360 |
| ggtgagcatg | tgaactcac | tgaaagagac | gacaggcatg | gttatatctt | aagccgtgat | 420 |
| tttgccggca | ctaaaaaatg | gcgcacatgc | tttacggctg | atgccacagg | gcataccatg | 480 |
| ctttatgcgg | tcgctaata | agccttacac | cacaaagtgg | atattcaaga | cagaaaggac | 540 |
| atgctcgctt | tcattcatca | tgataataaa | tgctatgggg | cggtggtaag | ggatttgatc | 600 |
| acaggcgaaa | tttcagcgta | tgttttctaa | ggcagcgtt | tagctaccgg | aggttatggg | 660 |
| cgcgtgtata | aacacaccac | taacgctgtg | atttgcgatg | gagccggggc | tgcaagcgcc | 720 |
| ttagaaccgg | gcgtggctaa | attgggcaac | atggaagcgg | tgcaattcca | ccctaccgct | 780 |
| ttagtgccaa | gcgggatttt | aatgaccgaa | gggtgcaggg | gcgatggcgg | tgttttaaga | 840 |
| gacaaagttg | gcagacgctt | catgcccgt | tatgagccgg | agaaaaaaga | gcttgcaagc | 900 |
| agagatgtgg | tctcaaggcg | gatttttagag | catatccaaa | aaggctatgg | agccaaatcg | 960 |
| ccttatgggg | atcatgtgtg | gctggatatt | gctatttttag | ggcgtaacca | tgtggaaaaa | 1020 |
| aacttaaggg | atgtgcgcga | tatagccatg | acttttgcgg | gcattgatcc | ggctgatagc | 1080 |
| aaggaacaaa | ccaaagacaa | catgcaagga | gtgcccgcaa | atgagcctga | atacgggcaa | 1140 |
| gcgatggcca | agcaaaaagg | ctggatcccc | ataaaaccca | tgcaaacacta | ttctatgggt | 1200 |
| ggggtttagga | caaaccctaa | aggcgaaacc | catttaaaag | gcttgttttg | cgcggttgaa | 1260 |
| gcggtatgct | gggatttgca | tggttttaac | ctgttggggg | gtaattctgt | gagtgaagcg | 1320 |
| gtggtcgctg | gcatgatcat | tggggattat | tttgctcgc | attgtttaga | agcgcaaat | 1380 |
| gaaatcaaca | cgcaaaaagt | tgaagctttc | attaaagaaa | gccaagacta | tatgcatttt | 1440 |
| ttattgcata | atgaaggcaa | agaagatgtg | tatgaaatta | gagagcgcat | gaaagaagtc | 1500 |
| atggatgaaa | aagtgggcgt | ttttagagaa | ggcaaaagga | tagaagaagc | ccttaagaa | 1560 |
| ttgcaagagc | tttatgcacg | ctccaaaaac | atttgcgtga | aaaacaaggt | tttacacaat | 1620 |
| aaccctgaat | tagaagacgc | ttaccgcacc | aaaaaaatgc | tcaaaactgc | gctttgtatc | 1680 |
| actcaaggag | cgttactgcg | cactgaaagc | agaggggctc | acacaaggat | tgactaccct | 1740 |
| aaaagagacg | atgaaaaaatg | gcttaatcgg | actctagcga | gctggcctag | cgctgagcaa | 1800 |

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|------|
| gacatgccca | cgattgaata | cgaagaatta | gatgtgatga | aaatggaaat | cagccctgat | 1860 |
| tttaggggct | atggcaaaaa | gggttaatttc | atccccacc | ccaaaaaaga | agagcgcgac | 1920 |
| gctgagattt | tgaaaacgat | tttagaacta | gaaaagcttg | gaaaagacag | aatagaagtc | 1980 |
| caacatgcgc | tcatgccttt | tgaattgcaa | gaaaaataca | aggctaggaa | tatgcgttta | 2040 |
| gaagatgagg | aagtcagggc | taggggggaa | catttgtatt | ctttcaatgt | ccatgagtta | 2100 |
| ttggaccaac | acaacgctaa | cctaaaagga | gaacaccatg | ag | | 2142 |

Seq ID 19

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|------|
| atgaaagata | gttttctttt | cacttctgaa | tcagtaaccg | aggggcatcc | tgacaaaatg | 60 |
| gctgatcaaa | tcagcgatgc | ggtttttagat | tacattattg | agcgggatca | aaaagccaaa | 120 |
| gtcgcatgcg | agacttttagt | ttctaaccggg | ttttgcatga | tcactggcga | gttaaaaact | 180 |
| tctgtttatg | cccctatgca | agagattgca | agagaagtgg | ttaaaaagat | tgggttatacg | 240 |
| gacgctcttt | atggcttttga | ttacaggagc | gcggcggttt | tgaatggcgt | tggcgagcaa | 300 |
| agccctgata | ttaatcaagg | cgtggataga | gaagatggcg | agattggggc | aggggatcaa | 360 |
| gggcttatgt | ttggttatgc | atgcaaagag | actgaaacgc | tcattgccctt | acccattcat | 420 |
| ttagcgcacc | agctcacttt | cgctctggct | caaaaaagaa | aagacaacac | tctgcctttt | 480 |
| ttaaggcctg | atggcaagtc | tcaagtgagc | gtgcgttatg | aaaacaacaa | gcctgttaagc | 540 |
| attgatacga | ttgtcatttc | cacccaacat | tccccagaag | tttcacaaaa | acatttaaaa | 600 |
| gaagctgtga | ttgaagagat | cgtgtataag | gtttttatcca | aagaatattt | gcatgacaat | 660 |
| atcaagtttt | ttgtcaatcc | tacaggaaaa | ttcgttatcg | gtgggcccga | agggcgatgcg | 720 |
| ggcttgacgg | gcagaaaaat | catcgtggat | acttatgggg | ggagttgccc | gcatggcggg | 780 |
| ggagcggtta | gcgggaaaga | ccctagcaaa | gtggatagga | gcgcggctta | tgcggcccg | 840 |
| tatgtggcta | aaaatttggg | agcagtgagg | gtttgcatga | aagcgaccgt | gcagcttgct | 900 |
| tatgcgattg | gggtgataga | gccagtgtct | atztatgtga | acacgcataa | cacgagcaag | 960 |
| tattcaagcg | ctgaatttga | aaaatgcgtg | aaactgggtt | tcaaaactcac | gccaaaaggc | 1020 |
| attattgaaa | gcttggattt | attaagaccc | atztatcgc | tcacttcagc | ttatgggcat | 1080 |
| tttgggcgcg | aattagagga | attcacttgg | gaaaaaacca | acaaagctga | ggagattaaa | 1140 |
| cggttcttta | agcgt | | | | | 1155 |

Seq ID 20

| | | | | | | |
|------------|-------------|-------------|------------|-------------|------------|------|
| atgatgaaaa | ttgtaataga | cttaatgggg | gctgaccatg | gggttttacc | cgttattgag | 60 |
| ggagtctcaa | gggctttaga | aaataagagt | tttagcacgg | tttttagtggg | ggataaagac | 120 |
| aaagcaaccc | cttttatttc | taaagagtta | gccagcaaa | tggaaatgat | ccacacgcaa | 180 |
| gattacatca | agatggaaga | agccgccact | gagggcatca | agcgttaagg | atcttccatt | 240 |
| tacttgggca | tggatatctt | aaaaaatggg | gctgacgctt | tgatttcagc | ggggcatagc | 300 |
| ggagcgacta | tgggttttag | caccttgctg | ttagggcgta | tcaagggggg | tgaaggccct | 360 |
| gctatttgca | ctttgatgcc | tagcgttggc | aaacgcctta | gcgtgctgtt | agacgcagga | 420 |
| gcgaacaccg | attgcaagcc | tgaatatattg | attgattttg | ctcttatggg | gtatgaatac | 480 |
| gctaaaagcg | tgttgcatca | tgatagccct | aaggtgggtc | ttttgagtaa | tggcgaagaa | 540 |
| gatattaaag | ggaacatgct | cgttaaaagaa | acgcataaaa | tgctgaaagc | ttatgacttc | 600 |
| ttttatggca | atgtggaggg | gagcgatata | ttcaaagggg | ttgtggatgt | ggtagtttgc | 660 |
| gatggcttta | tggggaaatgt | ggtcttaaa | acaacagaag | gggtcgctag | cgcaataggc | 720 |
| tctattttta | aagatgaaat | taaaagctct | tttaaatcta | aaatgggggc | tttgatgctt | 780 |
| aagaatgcgt | ttgatatttt | aaaacaaaaa | accgattacg | ctgaatatgg | gggagcgccg | 840 |
| cttttggcgc | tgaataaaa | cgtgatcatc | agcctaggca | agagcaacgc | tagagcgatt | 900 |
| gaatgcgcga | tttatcaggc | tattagcgct | gttgaaagtc | aggtttgttt | gaggattact | 960 |
| caagcgtttg | agagcttgaa | gcctagcgct | tctcaaagtg | atcagcaaga | cgct | 1014 |

Seq ID 21

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|------------|-----|
| atggaatttt | acgcctctct | taaatccatt | gcgatgcattg | ttccaagcga | gcgtgtgaaa | 60 |
| aatgcagagt | tccagcaatt | tttggatacc | agcgatgagt | ggatagaaaa | aaggaccggt | 120 |
| atcaaagaac | gccgtttcgc | taacgatgaa | gaaaaaagca | gcgatttagg | ggtaatagcg | 180 |
| gctaaacaag | ccatagagag | agcgcattha | accccaaaag | acattgatth | gggtggtgta | 240 |
| gcgactttta | gcoctgattt | tttggccatg | ccttcaaccg | cttgcgtggt | gagcgcgaaa | 300 |
| ttaggcattg | aaaacaagcc | ggcgtttgat | atctcagccg | cttgoacggg | ttttatctat | 360 |
| ttattatcgg | tggctaaggc | ttatgttgag | agcgggatgt | atgaaaatgt | gctgattgtg | 420 |
| ggggcagaaa | aaacgagcag | cgtgttagat | tttaaaagaca | gggggacttg | tattttattt | 480 |
| ggcgatgggg | ctggggcggtg | cgtgataggc | agaaccaagc | gtttaaaaga | aagcatttta | 540 |
| gatgtgcaaa | tctcagcgaa | cggaattttt | tctaattatc | tctatacgcc | aaggactcta | 600 |
| aaacccacgc | cttttaacgc | taaagaagaa | gcttcagagc | cttttttgtg | tatgaaaggc | 660 |
| aatgaagtgt | ttaaactagc | ggtaaaaacg | cttttaaaag | atgtggaaat | gatcttagaa | 720 |
| aaaaacgctc | tcaaacctga | agacgtgcgt | ttgtttatcc | cgcatcaagc | taatttttag | 780 |
| atcattcaag | cggtgcggga | gcatttggtg | tttaaaagatg | agcaagtggg | tttaaccgtg | 840 |
| cataaatacg | gcaacacttc | agcagccagt | atccctatgg | ctatgggtga | agcttatgaa | 900 |
| gaggggcggt | tgaaaaaggg | cgattttaatg | cttttagacg | cttttgggtg | aggattgact | 960 |
| tgggggttcag | cgttgggtgta | ttttggagga | agt | | | 993 |

Seq ID 22

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgtctaatac | aagaatacac | ctttcaaact | gaaatcaacc | agcttttggga | tttgatgatc | 60 |
| cactcttttgt | attctaataa | agagatTTTT | ttaagagagt | tggtttctaa | cgcgagcgac | 120 |
| gcttttgaca | agctgaatta | tttaattgctg | accgatgaga | aattaaaagg | gctgaataacc | 180 |
| acgcctagca | ttcatttgag | ttttgatagc | cagaaaaaga | ccttaacgat | taaagataat | 240 |
| ggtataggca | tggataaaaa | cgatctcatt | gagcatctag | gcacgatcgc | taaatacaggc | 300 |
| acgaagaatt | ttttaagcgc | tttgagtggg | gataagaaaa | aagatagcgc | tttaattggc | 360 |
| cagtttgccg | tgggctttta | ttcagcggtt | atggttagcga | gtaagatcgt | cgttcaaac | 420 |
| aaaaaggtaa | atagcgatca | ggcttatgca | tgggtgagcg | atggtaaggg | caagtttgaa | 480 |
| atcagcgagt | gcgttaaaga | tgagcaaggc | acagaaatca | ccctctttt | aaaagatgaa | 540 |
| gattctcatt | ttgcgagccg | ttgggagatt | gatagcgttg | ttaaaaagta | ttctgagcat | 600 |
| atcccttttc | ctattttttt | aacttacacc | gatacgaaac | atgagggcga | aggggataat | 660 |
| caaaaagaaa | ttaaagaaga | aaaatgcgaa | cagatcaatc | aagcgagcgc | tttatggaaa | 720 |
| atgaataaga | gcgaattaaa | agacaaagat | tacaaagagt | tttaccatc | gtttgcgcac | 780 |
| gataacagcg | aaccttttgag | ctatatccat | aataaagtgg | aaggctcttt | agaatacaca | 840 |
| acgctttttt | acatccctag | cacagcgccc | tttgacatgt | ttagggtgga | ttataaaagc | 900 |
| ggggctcaaac | tttatgttaa | aagggtgttt | atcactgatg | atgacaaaga | attgttgccc | 960 |
| tcttattttga | ggtttgttaa | aggcgtgatt | gacagcgaag | atttaccctt | gaacgtgagc | 1020 |
| cgtgaaatct | tacagcaaaa | caagatttta | gccaatatcc | gttcggcttc | agtgaaaaag | 1080 |
| attttaagcg | agattgaacg | cttgagcaaa | gatgaaaaaa | attaccataa | attctatgag | 1140 |
| cctttcggga | aagtgtttaa | agaaggcttg | tatggggatt | ttgaaaacaa | agaaaaactt | 1200 |
| ttagaattgt | taagattcta | ttctaagac | aaagaaaaat | taatttcttt | gaaagaatac | 1260 |
| aaagaaaatt | taaaaagaaa | tcaaaaaagc | atttactacc | ttttaggcga | aaatttagat | 1320 |
| ttattaaagg | cgtcccgct | tttagaaaaa | tacgctcaaa | aaggctatga | tgttttgtaa | 1380 |
| ttgagcgatg | aaattgatgc | gtttgtgatg | ccaggcgtga | atgaatacga | taaaacgccc | 1440 |
| tttaaagacg | ctagccatag | cgagagcttg | gtttggaaga | aatccatgat | taaaacgccc | 1500 |
| gaggtaaaag | atcagcttaa | agatttaattg | aaagcgtttg | aagaaaatct | taaagatgag | 1560 |
| attaaagggtg | tagagctttc | cagtcattctc | acttcagcgg | tggctttaat | aggcgatgaa | 1620 |
| caaaatgcga | tgatggctaa | ttggatgcgt | caaatgggtc | aaagcgtgcc | tgaagcaag | 1680 |
| aaaacgctag | aattaaaccc | taaccacgcg | attttgcaaa | aactcttaaa | atgtgaagat | 1740 |
| aaagagcagt | ttagcgtttt | tatctgggtg | ctttatgatg | gggcgaaact | tttagaaaaa | 1800 |
| ggggcttttaa | aagacgctaa | aagttttaac | gaacgcctaa | atagcgtgct | attgaaagcg | 1860 |
| ttg | | | | | | 1863 |

Seq ID 23

| | | | | | | |
|-------------|------------|------------|-------------|-------------|------------|-----|
| atgctaggaa | acgttaaaaa | aacccttttt | ggggctttgt | gtttgggcac | gttgtgtttg | 60 |
| agaggggttaa | tggcagagcc | agacgctaaa | gagcttggtta | atttaggcac | agagagcgcg | 120 |
| aagaagcaag | atttcgctca | agctaaaacg | cattttgaaa | aagcttggtga | gttaaaaaat | 180 |
| ggctttggat | gtgttttttt | aggggcgttc | tatgaagaag | ggaaaggagt | gggaaaagac | 240 |
| ttgaaaaaag | ccatccaatt | ttacactaaa | gggtgtgaat | taaatgatgg | ttatgggtgt | 300 |
| aacctgctag | gaaatttata | ctataacgga | caaggcgtgt | caaaaagacg | taaaaaagcc | 360 |
| tcacaatact | actctaaagc | ttgcgactta | aacctatgctg | aagggtgtat | ggtattagga | 420 |
| agcttacacc | attatggcgt | aggcacgcct | aaggatttaa | gaaaggctct | tgatttgat | 480 |
| gaaaaagctt | gcgattttaa | agacagccca | gggtgtatta | atgcaggata | tatatatagt | 540 |
| gtaacaaaga | attttaagga | ggctatcggt | cgttattcta | aagcatgcga | attaaagat | 600 |
| ggtagggggt | gttataattt | aggggttatg | caatacaacg | ctcaagggtac | agcaaggac | 660 |
| gaaaagcaag | cggtagaaaa | ctttaaaaaa | ggctgcaaat | caagcgttaa | agaagcatgc | 720 |
| gacgctctca | aggaattaaa | aatagaactt | | | | 750 |

Seq ID 24

| | | | | | | |
|-------------|-------------|------------|------------|-------------|------------|------|
| atgagaaaga | aaggcatgtt | tgaagagata | caaaaagaat | ggctgagcaa | cattcaaaag | 60 |
| gatttgttgt | ctgggtttgt | gggtgggctt | tctgtgatcc | cagagacggc | cggctttgcg | 120 |
| atcatggtgg | gttttagatg | gggcgtggcg | ttttatacga | ccttttacat | ggcttttggt | 180 |
| ttgtctcttt | ttggggctag | aaaggcgatg | attagcgcag | cggccggctc | agtgccgctc | 240 |
| attttagtggt | gcgtgggttaa | aaactatggg | cttgaatac | cgggcgtggc | gactcttatg | 300 |
| gcagggggtgt | tgcaaatctt | tttaggctat | ttgaaaatag | ggaatctttt | gaggtttatc | 360 |
| ccccaatcag | tgatgtatgg | ctttgtgaac | gcgctaggca | ttttgctttt | aatggagcaa | 420 |
| ttcaaatctc | ttcaaaaacca | aaatttgggg | gtgtttgtct | tgctcgctat | tgggatactc | 480 |
| atcatttatc | tttttctctt | aatcactaaa | aaaatccctt | ctaactctgat | ttgtatcctt | 540 |
| atagtgagcg | cgatcgcttt | aatttttgat | atgcattgcg | cgaatttggg | gagcattgag | 600 |
| caagggggtt | caggctttca | tttcatcatt | atccccaaaa | atttggattt | taaaataatg | 660 |
| atagagttgt | tgccctacgc | tctttcttta | gcactagtgg | gaacgataga | aagcttatgt | 720 |
| acggctaaaa | cttttagatg | gatttttaaa | gacggcgtga | gcgataaaaa | taaagaaact | 780 |
| aaagcgcaag | gcttggggaa | tatcatctca | gggttttttg | ggggaatgac | aggggtgcgt | 840 |
| ttagtggggc | agtctatcat | taacgcaaaa | tccggggcta | aaacaaggct | ttctactttt | 900 |
| tttgcgggct | tttctttaat | ggtgctcata | ttagtgttta | atgaatatgt | ggttaagatc | 960 |
| cccattgtgg | cggttgtggc | ggtaatgggt | atgattttct | tcaccacttt | taatttccaa | 1020 |
| tccattatta | acattaaaaa | aatcaagctc | tatgacacgc | tcaacatgct | cttagtcgtg | 1080 |
| gcgggtgggt | tatacacgca | taatttagcg | ataggggttg | tgggtggggg | tttagtcaat | 1140 |

gcggttatgga tcaaatctaa agggattgca

1170

Seq ID 25

| | | | | | | |
|-------------|-------------|-------------|------------|------------|-------------|------|
| atgaaaaaaa | cgatttttact | ttctcttatg | gtttcatcgc | tcctcgctga | aaatgacggc | 60 |
| gtttttatga | gcgtgggcta | tcaaatcggc | gaagcgggtc | aacaagtga | aaacaccggc | 120 |
| gaaatccaaa | aagtctccaa | cgcttacgaa | aatttgaa | atcttttaac | ccgctataac | 180 |
| gaactcaaac | aaacggcctc | taacaccaat | tcaagtaccg | ctcaagcgat | tgataatcta | 240 |
| aaagagagcg | ctagccgatt | gaaaaacgacc | cccaatagcg | ctaatacagc | cgtgtcttca | 300 |
| gcgctcagct | ctgcggtagc | catgtggcaa | gtaatagtct | ctaatttagc | caataactcg | 360 |
| ctacccacta | gtgaatacaa | caaaatcaat | gcgatttctc | aatcgctcca | aaacacccta | 420 |
| gaaaataaaa | acaatgatct | taaaattgaa | aatgactacg | accatctttt | aactcaagct | 480 |
| agcaccatta | ttaataccct | tcaaagccaa | tgcccaggca | tagacggagg | caatggcaaa | 540 |
| ccatggggca | ttaatgcaag | cgggaaacgca | tgcaatattt | ttggcaacac | ctttaacgcc | 600 |
| atcactagca | tgatagatag | cgctaaaaaa | gcccgcgag | atgccgaag | aactgccccca | 660 |
| gaaagtccaa | accaaccaag | tgcgtttaac | aacgctgatt | tcaataaaaa | ccttaatcaa | 720 |
| gtctcaagcg | ttattaatga | cacgatctct | tacctcaaag | gggacaattt | agcaaccatc | 780 |
| tacaacaccc | ttcaaaaaac | gcccgattct | aaagggtttc | aaagtttggg | gagccgatct | 840 |
| agctatagtt | attccctcaa | cgaaccccaa | tattctgaat | tccaaactac | caccaagag | 900 |
| tttggccata | acccttttag | aagcgtgggt | ttaatcaact | ctcaaagcaa | taacggagcg | 960 |
| atgaatggcg | tggcggtgca | attaggctat | aagcaattct | ttgggaaaaa | taaatttttt | 1020 |
| gggatccggt | attatgcctt | ttttgattac | aacctgcct | atatcaaate | caactttttc | 1080 |
| aactccgctt | ccaatgtttt | cacttatggc | gcaggcagtg | atcttttatt | gaatttcata | 1140 |
| aatggcggat | ccgataaaaa | ccgcaaaagtc | tcttttggca | tttttggagg | catcgctcta | 1200 |
| gcaggcacga | catggcttaa | ttcccaattt | atgaatttaa | aaaccaccaa | tagcgcttac | 1260 |
| agcgcttaaga | tcaacaacac | caatttccaa | ttcttattca | atactgggtt | aaggcttcaa | 1320 |
| gggattcacc | atggcggtga | attaggcggtg | aaaatcccca | ccatcaacac | gaattactat | 1380 |
| tctttcatgg | gcgctaaatt | agcataccga | agactttata | gcgtgtattt | caattatggt | 1440 |
| ttggcctat | | | | | | 1449 |

Seq ID 26

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgggtgtca | aattttttaa | aatattagtt | tgtgggttat | ttttttggag | cttgaacgcc | 60 |
| cattttatggg | gaaaacaaga | caatagtttt | ttgggggttg | ctgaaaaagc | ctataaaagc | 120 |
| gggaattatt | ctaaagccac | atcttatttt | aaaaaagcat | gcaacgatgg | ggtgagtga | 180 |
| ggttgacgc | aattaggaat | catttatgaa | aacgggcaag | gcactagaat | agattataaa | 240 |
| aaagccctag | aattattata | aaccgcatgc | caggctgatg | atagggagg | gtgttttggg | 300 |
| ttaggggggc | tttatgatga | gggggttaggc | acgactcaaa | attatcaaga | agccattgac | 360 |
| gcttatgcta | aggcggtcgt | tttaaaacac | cctgagagtt | gctacaattt | aggcattatt | 420 |
| tatgaccgaa | aaatcaaagg | caatgccgat | caagcgggtta | cctactacca | aaaaagctgt | 480 |
| aatttttgata | tggctaaggg | gtgttatggt | ttggcggtgg | cttatgaaaa | aggcttttta | 540 |
| gaagtcaaac | taagcaacca | taagccgtc | atctattatt | tgaaagcatg | ccgattggat | 600 |
| gatgggcagg | cttgctcgcg | gttagggagt | ttgtttgaaa | atggcgatgc | agggcttgat | 660 |
| gaagattttg | aagtggcggt | tgattacttg | caaaaagctt | gcgggttaaa | caattctggg | 720 |
| ggttgcgcg | gttttaggctc | tatgtatatg | ttaggcaggt | atgtcaaaaa | agatccccaa | 780 |
| aaggctttta | attttttcaa | acaagcatgc | gatattgggga | gtgcgggtgag | ttgctctagg | 840 |
| atgggcttta | tgtattccca | aggggacgct | gttccaaaag | acttgaggaa | agcccttgat | 900 |
| aattatgaaa | gggggttgca | tatgggcgat | gaagtgggtt | gcttcgctct | agcgggcgatg | 960 |
| tattacaaca | tgaagacaa | agaaaacgcc | ataatgattt | atgacaaggg | ctgtaagcta | 1020 |
| ggcatgaaac | aagcatgcga | aaacctcact | aaacttaggg | ggtat | | 1065 |

Seq ID 27

| | | | | | | |
|------------|------------|-------------|-------------|-------------|------------|------|
| atggagttag | aaactcattt | gtcaaaatat | ttcacccctag | cctttacgca | taaaagcatg | 60 |
| agcttagaaa | tgcgagaaaa | actcgctatt | aattcgaatg | caacgcttaa | agaattttta | 120 |
| caaaccatta | aaaaccattg | ccctaacatc | aaagagtga | tggtgttatc | cacatgcaat | 180 |
| cgctttgaaa | ctatgcgag | cctaaaacac | ggcgctaata | ctaatagaaca | aaaaaacgca | 240 |
| ctattaaaga | ttttggctca | aaataaaaaa | atgagcgtgt | ctgattttaga | aaaatgcggt | 300 |
| ttaatgaaca | ctgatgaaag | cgcagtcctat | catgtcttta | gcgtgtgcag | cagtttggat | 360 |
| agcttggtgg | ttggggaaac | tcaaatacaca | gggcagatga | aaaacgctta | taaattcgct | 420 |
| tttgaagaga | aattttgtct | taaagattta | acccgattgc | tccattttgc | tttcaaatgc | 480 |
| gccgctaagg | tgcgcaattt | aaccggcatt | tccaagcaag | gggtttccat | ctcttcagt | 540 |
| gcggtcaagg | aagcgcttaa | tatttttgaa | aaagaaagga | ttaaggataa | aaaagccctt | 600 |
| gtgatagggc | ttggcgagat | ggctcaatta | gtcatcaagc | acctttttaa | caagcaattt | 660 |
| gaagcgctta | tcttagggcg | taatgcggct | aaatttgaa | atctcatcaa | agaattagaa | 720 |
| gaacctaaaa | aagtaagctt | tcaaaatata | gaaaatttaa | acgcttatat | caatgaatac | 780 |
| gaactgcttt | tttgcgccac | ttcttcgcgc | catttttatc | tgcaaaatcg | catgttataa | 840 |
| gaaacgattt | tcaggcggtt | ttgggttgat | ttagccgtgc | cacggaatat | tgaaaagccg | 900 |
| gtattggata | atattttctt | atacagcggt | gatgatttag | agcctatggg | gagagaaaat | 960 |
| gtggaaaaca | ggcaagagag | cagaatgaga | gcttatgaga | ttgtaggggt | tgccacaatg | 1020 |
| gagttttacc | aatggattca | aagtttagaa | gtagagcctg | tgattaaagga | tttaagggaa | 1080 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| ttggctagga | tttcagccca | aaaagaattg | caaaaagcgc | ttaaaaaacg | ctatgtgcct | 1140 |
| aaagaatacg | aaaacaacat | tgaaaagatc | ttgcacaacg | ctttcaacac | ttttttgcat | 1200 |
| aaccttacca | tcgccttaaa | aaagaacgct | caaaaagaag | aatccgatgt | gcttgtgggt | 1260 |
| gcgattaaaa | acttgtttaa | tttagacaaa | tctaacgcta | accatgccca | gaatttgaat | 1320 |
| ctctataaat | gcgaatatta | cgaggaa | | | | 1347 |

Seq ID 28

| | | | | | | |
|-------------|------------|------------|------------|------------|-------------|------|
| atgttcattg | tagcggtttt | gatgctggcg | tttttaattc | ttgtccatga | attagggcat | 60 |
| ttcactatcg | ctaggatttg | tgggtgaag | gtagaagtct | ttagcattgg | ttttggtaaa | 120 |
| aaactctgtt | tttttaagct | ttttggcagc | caattcgctt | tgtctttgat | cccgttggg | 180 |
| ggctatgtga | aattaaagg | catggataaa | gaagaaaatg | ggatgaatga | aaccacggat | 240 |
| gacagctatg | cgcaaaaaag | cccttttcaa | aagctatgga | tactatttgg | gggggctgtt | 300 |
| tttaattttc | tttttgcat | tttagtgtat | tttttctg | cattgggtgg | ggaaaaagtc | 360 |
| ttactgccc | tcattggcga | tttagacaaa | aacgcgctag | aagctgggct | attaaagggg | 420 |
| gataaaatcc | tttctatcaa | ccataaaaaa | atagcgagtt | ttagagagat | tagaagcgta | 480 |
| gtggcgctg | ctagaggcga | gttggtttta | gaaatagagc | gaaacatca | ggtttttagaa | 540 |
| aaacgactga | cccccaaat | cgtagcgtga | ataagcgatt | ctaataatcc | taataaagtg | 600 |
| atccgggtata | aagcgatagg | catcaagcca | gacatgcaaa | aaatgggct | tgtttcttat | 660 |
| tctttgtttc | aagcgtttga | aaaggccttg | agtcggttta | aagaggcgct | tgttttgatc | 720 |
| gtggattctt | taaggcgttt | gattatggga | agctcttcag | ttaaggaatt | gagcgggtg | 780 |
| gtaggcattg | tgggagcgtt | aagccatgcc | aatagtttga | gcatgctttt | gttgtttggg | 840 |
| gcgtttttgt | ccatcaattt | agggatttta | aacttactac | ccattccagc | cttagatggg | 900 |
| gcgcaaatgc | taggggtgt | tttataaaat | atttttcata | tcactttgcc | aacacccata | 960 |
| caaatgcgt | tgtggctagc | gggggtgggg | tttttggttt | ttatcatggt | tttagggctt | 1020 |
| ttcaatgatc | tcactcgttt | gcta | | | | 1044 |

Seq ID 29

| | | | | | | |
|-------------|------------|------------|------------|-------------|-------------|------|
| atgctgttaa | aaaacgcttc | gttttatgat | gatgaagt | taaaaagagc | ggatatccgc | 60 |
| ttaaaagatt | ccctcattac | agagattaaa | gaaaacttaa | gccctattaa | taatgaagaa | 120 |
| gtgattgagt | gcaggat | attcgtgctg | ccaagcttca | ttgatttgag | cgttactggg | 180 |
| ttggagggtt | atgaaaattt | aaaacaaaag | gcttttaaa | gggggtagg | gttactcaat | 240 |
| gtttttaatt | gcgatcaaa | cggcattaaa | aacatcatgg | caattaaaaa | caaccaacta | 300 |
| gctgacatcg | ccacgcttaa | aaataaagg | ggggaaattt | taatcgcgcc | atctgacgct | 360 |
| tttttagaac | tcattagcca | ctacgccaaa | tcctacaact | tgctctttt | aatctcttta | 420 |
| gaaaattctt | ttgaagccct | aaatagtggt | gaattagcct | atgaattggg | gcaaaatttt | 480 |
| gtggaaaatg | cgtttgaaaa | cacgcgcttg | gtgcgtttca | tggaaagttc | tagagcggtta | 540 |
| caaatccctg | tgcttttaga | taaagtgaat | agtatcacca | cgctcaaaact | catcaaaagcc | 600 |
| tttaattgatt | taggggcgaa | attacaagcc | caaacgcctt | taagccattt | agtttttagat | 660 |
| gagagcgtgt | atgaagatta | tgagccacga | tttaaaatcg | ctcctccttt | aagggtataaa | 720 |
| gaaagccaaa | acgccctaaa | agaagcccta | aaaaataacg | aaatcgccat | gctcacaagc | 780 |
| cttcatgctt | ctaaaaattc | taacgcacag | ctttttgaag | aaagcgcttt | tgggtgtgag | 840 |
| agcatagagg | acgcttttag | cgtggcttat | acttttttag | ttcaaaaaaa | ggttatcagc | 900 |
| ttccaacaac | tcattaaagt | catggcgatt | aaccaagcga | agttttttaa | actcaatgca | 960 |
| ggcgagggtta | atgaaaacca | attagccaat | ttgatgatcg | tggattttaa | cgctcaaaaca | 1020 |
| agagtgaagta | atcaaaattc | gcccttttat | ggtttggaat | tgtatggcga | agtgcгаааа | 1080 |
| atgatcttaa | aagggcaaac | cacattttat | aaggagaatg | catgcaagaa | atca | 1134 |

Seq ID 30

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|------|
| ttgaaaaatg | cgattgtcag | gctttcagcg | cttggggata | ttatcgtgag | cgcggtgttt | 60 |
| ttggcggtag | ttaaagagt | tctgcctaac | gcccaaatag | aatggttcgt | ggatgaaaga | 120 |
| tttagtgcca | tttttagagca | ttccccctat | attgataaat | tacaccccat | cgctttaaaa | 180 |
| agtgactca | aaaccttgaa | tcctttgaa | attttcaaac | tttttaaatc | tttaagggtc | 240 |
| tatgaatacg | atataatcat | tgacatgcaa | ggcctagtca | aatccgctct | catcacgcaa | 300 |
| atgttgaag | cccataaaa | agtcggcttt | gattacgctt | cggctagaga | gggtttgagc | 360 |
| atgttttttt | actcgcaaaa | agtttctatc | gcttatgatg | agcctgtttt | aaagcgcaat | 420 |
| ttcacgctcc | tttctcatgc | cctaaacttg | ccccaaaaag | aaatttcaaa | agaaatttca | 480 |
| gagagcttaa | gctctagggc | taaagcggtt | tcttaccagc | cttctccaaa | aattgatgcy | 540 |
| ttaaatttga | ataagaataa | gccaaaaatc | ctttttattt | tagaaaactc | taaaatcaat | 600 |
| aaaacttacc | ccatagagcg | ttttaaagaa | tttagcgtta | tttttagaaa | ttttcaaat | 660 |
| tgcttggtat | ggcatgctga | tgaatataaa | gccactacgc | tttatcacgc | tttaaacac | 720 |
| caacgcgatg | tgttattgct | ccccaaactc | actttaaacg | aggttaaagg | gttgctcttt | 780 |
| aaaatggatt | tgattattgg | ggcgatagc | ggcatcacgc | atttagcatg | ggcgttgcaa | 840 |
| aaaccagca | tcaccttta | tggcaacacg | ccatggagc | gttttaaat | agaaagccc | 900 |
| atcaatgttt | cgctcaccgg | taattcaaac | gccaaactac | ataaaaagga | ttttctatc | 960 |
| caaatatag | agcctaaaaa | aattaaagaa | tgcgttttaa | acatcttaaa | ggaaaaagaa | 1020 |

Seq ID 31

| | | | | | | |
|------------|------------|------------|------------|------------|------------|----|
| atgaaaaagt | ttaaaaagaa | acaaaaaggt | atcaaacgat | cgcatcaaaa | tcaaaaaaca | 60 |
|------------|------------|------------|------------|------------|------------|----|

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atcttaaagc | gtcctttatg | gcttatgcct | ttactcatca | gcggggttgc | tagtgggggtg | 120 |
| tatgcgaata | atctgtggga | tttggttaaac | ccaaaagtgg | gggggtgagta | tgtgcattgg | 180 |
| gttaagggca | gtcagttattg | tgcatggtgg | gaatttgcctg | gggtgtttaa | gaatgtattg | 240 |
| ggggcaaatc | ataaaggcta | tgatgctgga | aacgcgccta | actatttgtc | ttctcaaaac | 300 |
| tatcaagcta | tttcgggtggg | tagtgggaat | gaaacgggga | cttatagttt | aagcgggtttt | 360 |
| accaattatg | ttgggggcaa | tctcacgata | aatctaggca | atagcgttgt | tttagattta | 420 |
| agcgggttcta | atagttttcac | ttcgtatcaa | ggttataatc | aaggcaaaaga | tgatgtaaca | 480 |
| tttacggttg | gcgcaatcaa | tttaaaccgc | acttttagaag | tgggtaatcg | tgtgggatcg | 540 |
| ggagctggca | cgcacaccgg | cacagccact | ttaaacttga | acgctaataa | ggtcaaatc | 600 |
| aactccaata | tcaacgcgta | taaaacttcg | caagtgaata | taggcaacgc | taacagcggt | 660 |
| attaccattg | gttcgggtttc | tttgagtggg | gatgtttgca | gttcttttagc | tagcgttggg | 720 |
| ataggggcta | attgtccac | ttctgggcct | agctattctt | ttaaaggac | gactaacgct | 780 |
| actaacacgg | cgttttagtaa | tgcaagcggc | agtttactt | ttgaagagaa | cgcactttt | 840 |
| agcggggcga | aatggaatgg | ggggacttat | accttttaata | aagagttag | cgtaccaat | 900 |
| aacaccgcct | ttagttagcg | tagttttaat | tttaaagggtg | taagctctt | taatggtact | 960 |
| tcgttttagta | acgcttctta | tacttttgac | aatcaagcca | ctttccaaaa | cagctccttt | 1020 |
| aatgggggga | cttttacttt | taataaccac | actaatccaa | ctaacaacgc | tcagcaccct | 1080 |
| caaattcaaa | acagctcttt | tagtggtaac | gctaccactc | ttaaaggcct | tgtgaatttc | 1140 |
| cagcaagcct | ttaacaattc | aaaccaccaa | ataacgatcc | aaaacgcctc | cttttaaac | 1200 |
| gccactttta | acaataccgg | taaaatcact | atagaaaaag | atgcgagttt | taataacacg | 1260 |
| acattcaaca | cttctgttga | tacaaacaac | atgagtgtta | ccgggtggcgt | tactttaagc | 1320 |
| ggtaaaaatg | acttgaaaaa | tggctcaacc | cttgattttg | ggagtctctaa | aatcactctc | 1380 |
| gctcaaggga | cgaacttcaa | cctcacaagt | ttaggcagtg | agaagagcgt | aacgatttta | 1440 |
| aattctagcg | gtgggatcac | ttatagtaac | cttttaaac | atgcaatcaa | cggcttgaca | 1500 |
| agtgccttaa | aaacgaacga | aagcctttca | aatccgcaaa | gtttcgctca | agggtttgtg | 1560 |
| gatataatca | cttacaatgg | ggttaccggg | cagcttttga | atgaaaacgc | tgcaacatct | 1620 |
| aaaccactg | actcttcgcc | ctctaaatcc | tctacaaact | ctacgcaagt | ctatcaagt | 1680 |
| ggttacaaaa | taggggatac | tatctacaaa | ctgcaagaaa | ctttcagcca | caattccatt | 1740 |
| attattcagg | ctttagagag | cgggacttac | acgcaccctc | ctgtcattaa | cggctccaaa | 1800 |
| tttgacttat | ccgcttcaaa | ttataatcaat | cttgacatgc | cttgggtatga | ccataaatat | 1860 |
| tacatcccta | aatcccaaaa | ttttacagag | agcgggactt | attacttgcc | gagcgtccaa | 1920 |
| atatggggga | gctacactaa | ctcgtttaaa | caaactttta | gcgcaaatgg | tagtaatctg | 1980 |
| gtgattgggt | ataactcaac | atggactgat | cataatgtct | cttctagcgg | cacgggtgtct | 2040 |
| tttggggaca | cttcagggag | cgtctttaat | gggcattgctg | gaccttgcc | gtattacca | 2100 |
| tgacaggca | cgactaacgg | caactatagc | gctcatcatg | tgatatcac | agcgaatctg | 2160 |
| cgttctggca | atcgatatag | caccgggtggg | gcagctaata | taatctttaa | tggggtagat | 2220 |
| agtatcaata | tcgctaacgc | taccatcacg | caacataacg | ccggaatcta | ttcaagctct | 2280 |
| atgacttttt | ccacgcaaa | catggataat | tcgcagaatt | tgaatggctc | aaattctaac | 2340 |
| ggcaaaactt | cgggtgatgg | caccactttc | actaacgaag | ctaaagatgg | gaaattcatt | 2400 |
| ttcaatgcag | ggcaagcgg | ttttgaaaac | accaacttta | atggaggagg | ttaccaattc | 2460 |
| agcggcgata | gcttgaattt | ttcaaacac | aaccagttca | atagcgggtc | gtttgaaatt | 2520 |
| agcgcaaaaa | acgcttcgtt | caataacgct | aactttaaca | acagcgcttc | ttttaatttc | 2580 |
| ataaattcta | acgcgaccac | ttcgtttgtg | ggggatttca | ctaacgctaa | ttcaaatttg | 2640 |
| caaatcgccg | ggaacgctgt | ttttgggaac | gtctactaatg | gctctcaaaa | taccgctaata | 2700 |
| tttaataata | ccggctctgt | taatatattca | gggaatgcaa | cctttgataa | tgtggtgttt | 2760 |
| aatggcccta | cgaacacgag | cgtgaaagg | caggttactt | taaataacat | cactttaaaa | 2820 |
| aacctgaacg | cccctttgtc | ttttggcgat | gggacgatta | cttttaacgc | tcattcgggtg | 2880 |
| attaatatg | ctgaatctat | cactaatggc | aaccttatca | ctcttgtaag | ctcttctaaa | 2940 |
| gaaattgaat | acaacaacgc | tttcagtaaa | aatctatggc | agctcatcaa | ctaccaagg | 3000 |
| catggggcaa | cgagtgaaaa | gctcgtctct | agcgcgggta | atggcggtta | tgatgtgggtg | 3060 |
| tattctttca | ataaccaaac | ctacaatttc | caagagggtt | tttcacaaaa | cagcatttct | 3120 |
| atccggcggt | tgggcgttaa | catgggtgtt | gattatgtgg | atatggaaaa | atcggatcat | 3180 |
| ttatattatc | aaaacgctct | cgtttttatg | acctacatgc | ctaatagcta | taacaataat | 3240 |
| ttagggaatg | caaacaacac | catttactat | tacgacaaga | gcattgattt | ttatgcgagc | 3300 |
| gggaaaaact | tattcactaa | agcgggaatt | tctcaaacat | tcaccgggca | aaacagcgcg | 3360 |
| atcgtttttg | gggctaaaa | catatggacg | agcttaagcg | atgcaccgca | gtctaaccac | 3420 |
| atcattcgct | ttggggacaa | taaggagca | gggagtaatg | atgcgagcgg | gcattgctgg | 3480 |
| aatttgcaat | gcataggctt | tattacaggg | cattatgaag | cgcaaaagat | ttacatcacc | 3540 |
| ggtagcattg | aaagcgggaa | tcgcattttc | agcgggtggg | gcgcgagcct | taattttaac | 3600 |
| gggcttcaag | gacttctttt | aacgaacgcg | actttgtata | accgcgcgcg | tggcacgcaa | 3660 |
| agctcgtcta | tgaattttat | ctctaacagc | gcgaacattc | aggctcaaaa | ctcctatttt | 3720 |
| atagacgata | ccgcacaaaa | tggcggtaac | cctaatttca | gtttcaacgc | tttgaatctg | 3780 |
| gatttttcta | acagctcttt | tagaggctat | gtggggaaaa | cgcaatctgt | ttttaaattc | 3840 |
| aatgccaaga | atgcgatcag | tttcaccaac | agcagaattt | taagctctgg | tttgtatcaa | 3900 |
| atgcaagcta | aaagcgtgtt | gtttgacaat | ttcaatttaa | gcgtttcagt | ggggacaagc | 3960 |
| agtattaaag | ccaatgcgat | caatctttct | caaaatgcct | ctattaatgc | gagcaaccat | 4020 |
| tcaaccttag | aacttcaagg | cgatttgaat | gtgaacgaca | ccagctcgct | caacctcaac | 4080 |
| caaagcacga | ttaatgtttc | caataacgcc | acgatcaacg | attatgcgag | cttgattgcg | 4140 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| agtaatggct | ctcaccttaa | ttttaacggg | gcgggttaatt | tcaattcagc | gaatattact | 4200 |
| acgagtttga | ataattcctc | tatcgtgttt | aagggggcg | tctcttttagg | agggcagttt | 4260 |
| aatttaagca | ataactcttc | tttagatttc | caaggctcta | gcgctatcac | ctctaacacg | 4320 |
| gcgttttaatt | tctatgataa | cgctttttct | caaagcccca | tacttttcca | tcaagccctt | 4380 |
| gacattaaag | cgcccttaag | tttgggaggc | aaccttttaa | accctaacaa | cagcagcgtg | 4440 |
| ctggattttaa | aaaacagcca | gcttgttttt | ggcgatcaag | ggagtttgaa | tatcgctaac | 4500 |
| attgattttac | taagcgatct | aaatgataat | aaaaatcggt | tgtataacat | cattcaagcg | 4560 |
| gacatgaata | gtaattggta | tgagcgatct | agcttctttg | gcatgcacat | caatgacggg | 4620 |
| atttatgatg | ctaaaaacca | aacttatagt | ttcactaacc | cccttaataa | cgccctaaaa | 4680 |
| atcaccgaga | gcttttaaaga | caaccaacta | agcgttacgc | tctctcaaata | cccggttatt | 4740 |
| aaaaacacgc | tctataacat | tggctctgaa | atttttaact | acaaaaaagt | ttataacaac | 4800 |
| gctaattggcg | tgtattctta | tagcgatgat | gcacaaggcg | tgttttatct | cacaagcaac | 4860 |
| gtgaaaggct | attacaaccc | taaccaatcc | tatcaagcca | gcggcagtaa | caacaccacg | 4920 |
| aaaaataata | atctaacctc | tgaatcttct | atcactctcg | aaacctataa | cgcgcaaggc | 4980 |
| aaccttatta | gcgcgttgca | catctataac | aagggtctata | atctcaacaa | tatcaagcg | 5040 |
| ttaggggcaaa | tggctctcaa | actctacctc | gaaatcaaaa | aggtattagg | gaatgatttt | 5100 |
| tgcacctcaa | gtttgaacgc | tttaaaactct | aatgcgctaa | accaacttac | caaactcatc | 5160 |
| acgcctaacg | actggaaaaa | cattaacgag | ttgattgata | acgcaaaaca | ttcggtgggtg | 5220 |
| caaaatttca | ataacggcac | tttgattgtg | ggagcgactc | aaatagggca | aacagacacc | 5280 |
| aatagcgcg | ttgtttttgg | gggcttgggc | tatcaaacac | cttggtgatta | tactgatatt | 5340 |
| gtgtgccaaa | aatttagagg | cacttattta | ggacagcttt | tagagtccag | ctcggtgat | 5400 |
| ttgggctata | ttgacacgac | ttttaacgct | aaagaaattt | atcttaccgg | cactttaggg | 5460 |
| agcggaacg | catgggggac | tggggggagc | gcgagcgtaa | cttttaacag | ccaaacttcg | 5520 |
| ctcattctca | atcaggctaa | tatcgtaagc | tcgcaaacgc | atgggatctt | tagcatgctg | 5580 |
| ggtcaagagg | gtattataaa | ggttttcaat | caagccgggc | tcgctaataa | tttgggcgaa | 5640 |
| gtggcggtgc | aatccatcaa | caaagccggg | ggattaggga | atttgatagt | aaatacgcta | 5700 |
| gggagtaata | gcgtgattgg | gggggtattta | acgcctgaac | aaaaaaatca | aaccctaagc | 5760 |
| cagcttttag | ggcagaataa | ctttgataat | ctcatgaacg | atagcggttt | gaatacggcg | 5820 |
| attaaggatt | tgatcagaca | aaaattaggc | ttttggaccg | ggctagtggg | gggattagcc | 5880 |
| ggactagggg | gcattgattt | gcaaaaccct | gaaaagctta | taggcagcat | gtcaatcaat | 5940 |
| gattttattga | gtaaaaaagg | gttggttcaat | cagatcaccg | gctttatttc | cgctaacgat | 6000 |
| atagggcaag | tcataagcgt | aatgttgcaa | gatattgtca | aaccgagcaa | cgctttaaaa | 6060 |
| aacgatgtag | cggcttttagg | caagcaaatg | attggcgaat | ttttaggcca | agacagctc | 6120 |
| aattcttttag | aaagcttggt | gcaaaaccag | caagattaaaa | gcgtttttaga | caaagctcta | 6180 |
| gcggctaaag | gttttagggc | tatttatgaa | caaggcttgg | gggatttgat | acctaattctt | 6240 |
| ggtaaaaaag | ggcttttcgc | tccttatggc | ttgagtcaag | tgtggcaaaa | aggggatttt | 6300 |
| agtttcaacg | cacaaggcaa | tgtttttgtg | caaaattcca | ctttctctaa | cgccaatgga | 6360 |
| ggcacgctct | cttttaacgc | aggaaattcg | ctcatttttg | ccggaaacaa | tcataattgca | 6420 |
| ttcactaacc | acgctggaac | cttcaatta | ttgtccgatc | aagtttctaa | cattaacatc | 6480 |
| accacgctta | acgctagcaa | cggccttaag | attaacgcgc | ctaataacaa | tgtttctgtg | 6540 |
| tctcaaggca | atctgtttgt | cagcgctagc | tgcgcgcaac | aaagcgatcc | aactacagct | 6600 |
| aatattgcaa | acccttgccg | gcttagcgcc | caaagcacga | atggcgcttc | ttctaataat | 6660 |
| gcgtcaaata | acgcgccaat | cgcttgagt | aataacgatg | aaagcttgat | ggttgccggc | 6720 |
| aatgatttca | atttttcagg | caatattttac | gctaattggg | tggttgattt | ttcaaagatt | 6780 |
| aaaggctctg | caaacattaa | aaacctgtat | ctttacaata | acgctcaatt | ccaagccaac | 6840 |
| aatctcacta | tttccaatca | agcgggtgta | gaaaaaaacg | ccagctttgt | aacgaataat | 6900 |
| ttaaacattc | aaggagcggt | taacaacaac | gccacgcaaa | aaatagaggt | gcttcaaaat | 6960 |
| ttagtgatcg | cttcaaacgc | ttctttaagc | accgggattt | atgggttaga | agtagggggg | 7020 |
| gctttgaata | attctggagc | gatccatttt | aattttagaaa | atacccaaac | gccaacggcg | 7080 |
| ctcattcaag | cagaggggat | cattaacctc | aacaccaccc | aaacgccttt | tatgaatgtc | 7140 |
| aataacagca | tggccaataa | tacgacttac | actttattaa | aaagcagccg | ttacattgat | 7200 |
| tacaatatca | acccaacag | cttgcaatcg | tatttgaaatc | tctacacttt | aatcaatatc | 7260 |
| aacgggaacc | acatagagga | aaaaaacggc | gcatttgactt | atttgggcca | acgggttttg | 7320 |
| ttgcaagata | aggggttatt | gttaagcgta | gcgctgcccc | actcaaacaa | cgcttctcaa | 7380 |
| aacaacattt | taagcctttc | tgtcctttat | aaccaagtta | aatgtctctg | cgccgataaa | 7440 |
| gcgatggatt | ttaccccccc | taccttacia | gattacattg | tgggcattca | agggcaaacg | 7500 |
| gcgctcaatc | aaattgaagc | tgttgggggg | aacgctatca | agtggctttc | aacattgatg | 7560 |
| atggagacta | aagaaaaccc | gttttttgcg | ccgatttatt | taaaaaacca | ctctttgaat | 7620 |
| gaaatcttag | gcgtaacaaa | agatcttcaa | aacaccgcaa | gcttgatttc | taacctaat | 7680 |
| tttagagata | acgctaccaa | tcttttagaa | ttggcgagtt | acaccaacaa | aaccagccgt | 7740 |
| ttacaaaaac | tctctgattt | tagatctaga | gaggagaggt | ctgatttttc | tttgtagag | 7800 |
| cttaaaaaaca | agcgtttttg | cgatcctaata | ccagagggtt | ttgtcaataa | ctctcaactt | 7860 |
| agcaaacacc | caaataacct | ttgggttcaa | ggggtgggag | gagcgagctt | tatttctggg | 7920 |
| ggcaatggca | cgcttttatgg | cttgaatgcg | ggctatgaca | ggttggttaa | aaatgtgatc | 7980 |
| cttgggggtt | atgtggctta | tggctatagc | gactttaatg | ggaacatcat | gcattctttg | 8040 |
| ggtaataatg | tggatgtggg | gatgtatgcg | agggcttttt | taaaaaggaa | cgaattcact | 8100 |
| ttgagcgcg | atgaaactta | tggaggcaat | gcaactagta | tcaattcttc | taattctttg | 8160 |
| ctctctgtgt | tgaaccaacg | ctacaactac | aacacctgga | caacgagcgt | gaacgggaat | 8220 |

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|------|
| tacggctatg | atttcatggt | caaacaaaaa | agcgtggtgc | taaaacctca | agtgggtttg | 8280 |
| agctatcatt | tcataggtct | aagtgggatg | aaaggcaatg | atgccgctta | caaacaattc | 8340 |
| ctcatgcatt | caaacccttc | taacgaatcg | gttttaacgc | tcaacatggg | gttggagagc | 8400 |
| cgtaaatatt | ttggtaaaaa | ttcctattat | tttgtaacgg | cgagactagg | tagggatcct | 8460 |
| ttgatcaaat | ctaaaggcag | caatacgggtg | cgttttgtgg | gcgaaaacac | tttattgtat | 8520 |
| cgcaaggggg | aagtttttta | cacttttgcg | agcgtgatta | cagggggcga | aatgcatttg | 8580 |
| tggcgtttgg | tgtatgtgaa | tgcgggggtg | gggcttaaga | tgggcttgca | ataccaagat | 8640 |
| attaatataa | ccgggaatgt | gggcattgcga | gtggcgctt | | 8679 | |

Seq ID 32

| | | | | | | |
|------------|------------|------------|-------------|-------------|-------------|-----|
| atgtttgaaa | aaattaccct | agcgcataag | gacttggttt | caagggtttt | aagcgctcaa | 60 |
| aaaatcgttt | tatcagatgt | gagttttacg | aattgctttt | tatggcagca | cgcaaggctc | 120 |
| attcaagtgg | cggtgattag | ggattgtttg | gtgattcaaa | ccacttatga | aatcaaaaaa | 180 |
| cccttttatt | tctatcctat | cggtagaat | gcgtttgaat | gcgtaaaaaga | gcttttgaaa | 240 |
| ttagaaaaaa | atttaagatt | ccactccctg | acttttagagc | aaaaagacga | tttgaaagac | 300 |
| aattttgtag | gggtgtttga | tttcacttac | aaccgagaca | ggagcgatta | cgttttattct | 360 |
| attgaagaat | tgatcgcttt | aaaagggaaa | aaataccata | agaaaaaaa | ccacctaaac | 420 |
| cagtttttaa | ccaatcatgc | gaattttgtt | tatgaaaaaa | tttctcctca | aaataaaaag | 480 |
| gaagttttag | aagcttctca | agcgtgggtt | ttagaagcc | aaaccgatga | tatagggtcta | 540 |
| atcaatgaaa | ataagggcat | tcaaagcgtg | ttagaaaatt | atgaaagctt | ggatgtaaaag | 600 |
| ggggggctta | ttagggttaa | tggggaaata | gcctcgttta | gttttgagga | agtttttaaac | 660 |
| gaagagagcg | cgctcatcca | cattgaaaaa | gccgcacag | atattgcagg | cgcttatcag | 720 |
| atcatcaacc | agcagttgct | tttgaatgaa | tttagtcatt | taacttacgc | taacagagaa | 780 |
| gaagatctag | gattagaggg | tttaagaagg | tctaaaatga | gctataacct | ggtgtttttg | 840 |
| atagacaaat | acgaagccgt | tgctaaaaat | | | 870 | |

Seq ID 33

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|--------------|------|
| atgcgcgtta | cctttggctc | aaaatacaac | caaatgaata | actacaaaaa | cgctttacaa | 60 |
| aataaaatca | acgacgctaa | cacgcagatc | gcttcagggc | taaaaatccg | ttatgggttat | 120 |
| caaaaacagcg | acattaacaa | ccagaattta | aaattccaat | acgaagaaaa | cacttagat | 180 |
| caaggcattg | atgtggcgca | aaacgcttac | acttcaacgc | tcaataccga | caaagccttg | 240 |
| caagaatttt | ctaaaacgat | ggaggcggtt | aaaaccaaac | tcatccaatc | cgctaaccgat | 300 |
| gtgcattcag | aaacttctcg | cgccgctatc | gctaacgatt | tagaacgctt | aaaagagcat | 360 |
| atgataaatg | tcgctaacac | ttctataggg | ggggatattt | tatttggggg | cagttaagggtg | 420 |
| gataagcccc | ccattgatag | taatgggaaa | taccatggca | atggcgaaaga | tttaaacgtg | 480 |
| cttattagct | ctgataacct | tgtgccttat | aatatcagcg | ggcaagattt | gtttttaggc | 540 |
| accgataaag | acaaacacaa | actcattacc | accaacatta | aattattcaa | tcaaaacaag | 600 |
| ctccaccctg | atgtgatgga | cgttttagag | cattottcat | tgctgagga | agtttttatt | 660 |
| aaaccagcg | atgacttgcg | agaactcatc | ggcgataacg | ataaagacct | caccaatgac | 720 |
| cctaagaggt | ttttttattt | gcaaggcggt | aggcctgatg | gctccagttt | taaagaaaaa | 780 |
| ttcgcggttg | ataaagccta | tcaaaaccaa | gagagtgcct | ctaaagttag | cgatttggtg | 840 |
| gataaaatcg | ctcacgctta | cgggaaacact | tcgcaaaata | aagtctgtgga | tgtgagtttg | 900 |
| aacaattggg | ggcaaatgga | gatcaaaaaa | ctaaccctcg | gcagtgaata | tttggtttt | 960 |
| catttgattt | ctagcgatgg | ggattttgac | gatttagacg | ccttgcggtt | gagcgttaaa | 1020 |
| agggttactg | aatacatcaa | aagtgcgttt | gtaacggata | ggagtgttag | ccaagttaaa | 1080 |
| gcggtgccta | acatgtataa | tcccaagggtg | cttgaagtcc | ctagcgtgtt | tgtcactaaa | 1140 |
| gacaatgttt | tagccaacaa | aaacactaaa | ttgagcgaga | tttttggcga | tagcgtggaa | 1200 |
| acttttaaaa | tcaatgccag | ccgtttggac | gaaacaagcg | ctattaaaaa | cccaaacctc | 1260 |
| cctgtttatt | tggacattcc | cattctttta | gacgtgaaaa | attctacgat | taaagatttg | 1320 |
| aaagacgcga | tcaaaaaacg | cttcaataat | gaagtggatg | tggaaattga | aacaaacggg | 1380 |
| cgtttgagga | ttattgacaa | ttcttctaaa | gaatcgctta | tttctttggc | tttaagcgcc | 1440 |
| ctagatgcta | aaggactaga | agtggccggt | atccctacta | ataacgcgag | cgaataccaa | 1500 |
| aaaacctaact | tcaataaaga | aggggcaaaa | ttagaagca | atgtcgctca | aaccgctcaa | 1560 |
| aatggcgcgag | ctaattggctc | tactaaaactg | agtgaagccg | ctaaggggag | tttagaaaaa | 1620 |
| agcgttttta | acatgaaatt | aaacgatgtg | aatggcttat | ttttggaagc | gcaaatgaac | 1680 |
| ttggataata | atggggcttt | tttgagcctc | cctaattggca | ttaaaaatccc | gctttatgac | 1740 |
| cccacaagcg | ctgatattca | agcgtctaaa | cccaatgaag | tcacttacag | gcaacttatg | 1800 |
| gatgcgatga | gtatcgcgct | caattacagc | aatactgacc | cagccatcta | ccaacaaatc | 1860 |
| agcgataacc | ccacttccaa | agaaagcaag | gagcgtttta | ttggattgtt | aaaacaagct | 1920 |
| aaagacaacc | tttctgttaa | tttgaatgaa | gagggaaaag | tcattatcca | agataacatg | 1980 |
| cattccaaca | ccaaaatgca | gttcatgctt | tttgataaag | acgcgaatga | ttttctctca | 2040 |
| aacgccttgc | acagcgacaa | accaagcctt | aaattaaaacg | ctaataaacgc | tctcattatt | 2100 |
| gacaagccca | gcgtgaattt | ttttgatcaa | ttagaaaata | ccatcacttc | tgttaagaaaa | 2160 |
| gggatttatc | gcccggacgc | tttaggggat | acttattcta | gcgatatgag | taattttaggc | 2220 |
| attcaaaaacg | gcatcacct | tatagatcac | ttgagcgatc | acatagaaaa | aatgatcgct | 2280 |
| aaaaacgggtg | ctcatggcaa | ggcgtttgag | aacattatca | ggcgtaatga | agtttttaaaa | 2340 |
| acgcaagttc | aaagcattcg | tggggaaacg | accggcacgg | atatggcaga | aacttacaac | 2400 |
| aaattttcca | atctcactaa | caactataac | gctgttttgg | cttccacgaa | caaaatcaat | 2460 |

aatttgtctt taacgaaata cttg

2484

Seq ID 34

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|------|
| atggatagag | ccaaatttat | attcgttaca | gggggtgtgt | taagctctct | agggaaagg | 60 |
| atttcattctt | cttcaatcgc | tacgttttta | cagcattgca | attaccaggt | ttctattttg | 120 |
| aagatcgacc | cttatatcaa | tattgatcca | ggcaccatga | gccctttaga | gcatggggaa | 180 |
| gtgtttgtaa | ctagcgatgg | cgctgaaacg | gatttagaca | tagggcatta | tgaacgcttt | 240 |
| ttgaacagga | atttaacgag | gttgaataat | ttcactactg | ggcagatttt | ttcaagcgtg | 300 |
| atagaaaaatg | aaaggaaagg | ggaatatatta | ggcaaaacca | ttcaaactgt | ccccatgta | 360 |
| accgatgaaa | tcaaaaggcg | cattaaaagc | gcggttaagg | ggttggattt | tttaactgtg | 420 |
| gaagtgggcg | gaaccgtggg | cgatatggag | ggcatgtttt | atttggaaagc | gatccgocag | 480 |
| cttaaatttg | aattagggaa | tgaaaaagtc | atcaatgtgc | atgtaaccct | gatccccat | 540 |
| atccaaacca | ctaaccgaact | aaaaaccaaa | cccacgcaac | attccgtcca | agaattaaga | 600 |
| cgctttggcg | taaccctcca | aatcattttg | gcgcgatcgc | ctaagccttt | ggataaagag | 660 |
| ttgaaaaata | aaatcgcttt | gagttgcgat | gtggagcaag | acagcgtgat | tgtcgccaca | 720 |
| gacactaaaa | gcatttacgc | atgccctatt | cttttcttgc | aagaaggcat | tttaaccccc | 780 |
| attgccagac | gctttaattt | gaataaacta | caccccaaaa | tggcggcttg | gaacacttta | 840 |
| gtagaaaaga | ttatcgctcc | taaacacaaa | gtcaaaattg | gttttgtggg | caagtattta | 900 |
| agcttgaag | aatcttataa | atccttgatt | gaagccctaa | tccatgcggg | cgcgcactctg | 960 |
| gatacgcaag | tcaatattga | atggctggat | agcgagaatt | ttaatgaaaa | gacggattta | 1020 |
| gagggcggtt | atgcgatttt | agtgcctggg | ggctttggag | aaagggggat | tgagggcaaa | 1080 |
| atttgcgcca | ttcaaagggc | taggttagaa | aaactcccct | ttttagggat | ttgtttgggc | 1140 |
| atgcaattag | cgatcgttga | attttgtcgc | aatgttttgg | gtttaaaagg | ggctaactct | 1200 |
| acggagttta | accaacgctg | cgaataccct | gtggtgtatt | tgattggaga | ttttatggat | 1260 |
| caaaaccacc | taaaaacaggt | gcgcacctat | aattcgcctt | taggaggcac | catgcgatta | 1320 |
| ggcgaatacg | aatgcgaaat | tatgccaaac | agcttgttag | aaaaagctta | taaaaagcct | 1380 |
| agcattaaag | aaagacaccg | ccatcgttat | gaaatcaacc | ccaaataccg | ccaagagtgg | 1440 |
| gaaaaataagg | gcttgaaagt | ggtgggtttt | ggatcgaaac | atttgattga | agcgattgaa | 1500 |
| ttagaagatc | acccgttctt | tgtgggggtg | caattccacc | cagaattcac | ctccaggttg | 1560 |
| caaagcccta | accctattat | tttagatttc | attaagagcg | ctctttctaa | atcc | 1614 |

Seq ID 35

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|------|
| ttggatttaa | aggtattatt | gcaacggatt | gttgattttt | tcatcaagct | caataaaaag | 60 |
| caaaaaatcg | ccctgattgc | agctgggggt | ttgatcacgg | ctttgtctgt | gttttatttg | 120 |
| ctctatccct | ttaaagaaaa | agactacacg | caaggggggt | atgggggttt | atttgaagggt | 180 |
| ttagactcta | gcgataacgc | tttaattctta | cagcacctcc | agcaaaacca | aatcccttat | 240 |
| aaagtctcaa | aggacgacac | catccttatc | cctaaagata | aagtgtatga | agaaaggatc | 300 |
| actctggctt | ctcaagggat | ccctaaaacg | agtaaagtgg | gctttgaaat | ctttgacact | 360 |
| aaagactttg | gagcgactga | ttttgatcaa | aatacaaac | tcattcgcgc | cattgagggg | 420 |
| gaattgtcgc | aaacgattga | cccatatttg | aagccaatgt | gcatattgca | 480 | |
| atccctaaag | acagcgtgtt | tgtggctaaa | gaagtccctc | ctagcgcttc | ggtgatgctc | 540 |
| aaactcaagc | ctgacatgaa | gctttcaccc | actcaaattt | tagggattaa | aaatttaatc | 600 |
| gctgcagctg | tgcctaaact | cacgatagaa | aatgtgaaaa | tcgtgaatga | aaatggcgaa | 660 |
| tcaataggcg | aagggcatat | actagaaaaa | tccaaagaa | tagccctaga | gcaattgcac | 720 |
| tacaaacaaa | attttgaaaa | cattctagaa | ataaagattg | tcaatatctt | agcccctatt | 780 |
| gtggggggta | aaaacaagggt | ggttgcaagg | gtcaatgcag | agtttgattt | cagccaaaag | 840 |
| aaaagcacta | aagagacttt | tgatcccaat | aatgtcgtaa | ggagcgagca | aaatttagaa | 900 |
| gaaaaaaaag | aaggcgcttc | taaaaaacaa | gtcgggtggg | tgccbtgggt | tgtgagcaat | 960 |
| atcgggcctg | tgcaaggatt | gaaagacaat | aaagagccag | aaaaatacga | aaagtctcaa | 1020 |
| aacacaacca | attatgaagt | gggtaaaacc | attagcgaga | ttaagggcga | gtttggcact | 1080 |
| ttagtgcgtt | tgaatgcggc | ggttgtgggt | gatggcaagt | ataaaatcgc | gcttaagat | 1140 |
| ggggtaacaa | ctttagaata | cgagcctttg | agcgatgaat | cgcttcaaaa | aatcaacgct | 1200 |
| ctagtcaaac | aagccattgg | ctataatcaa | aatagaggcg | atgatgtggc | ggtgagcaat | 1260 |
| tttgagttaa | accctatggc | acctgtgatt | gataacgcta | ctttgagcga | aaaaatcatg | 1320 |
| cacaaaactc | aaaaaatctt | aggctcattc | acgcccctaa | tcaagtatat | tttagtgttt | 1380 |
| atagtgcctat | ttattttcta | taaaaaagtg | attgtgcctt | tcagcgaacg | catgctagaa | 1440 |
| gtggtgcctg | atgaagataa | ggaagtgaag | tccatgtttg | aagaaatgga | tgaagaagaa | 1500 |
| gatgaattga | acaaactggg | cgatttgagg | aaaaaagtag | aagatcaatt | agggcttaat | 1560 |
| gcaagcttta | gcgaagaaga | agtaagatac | gaaatcatct | tagaaaaagat | tagagggact | 1620 |
| cttaagaac | gccctgatga | aatcgcaatg | ctctttaaac | tcctaataca | agatgaaatc | 1680 |
| tcttcagacg | gcgcgaaagg | t | | | | 1701 |

Seq ID 36

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| atgtatgttg | aaaaaattct | ccagtcttta | cagaaaaaat | acccttatca | aaaagagttc | 60 |
| catcaagccg | tctatgaagc | tatcacttct | ttaaaacccc | ttttagacag | cgataaaagt | 120 |
| tatgaaaagc | atgcgatttt | agagcgtttg | attgagcctg | aaaggagat | tttttttagg | 180 |
| gtgtgttggc | tagatgataa | caatcaaatc | caagtcaatc | gggggtgtag | ggttgagttt | 240 |
| aattcggcta | ttggccctta | taaggggggt | ttgagattcc | accctagcgt | gaatgaaagc | 300 |

| | | | | | | |
|------------|-------------|-------------|------------|-------------|------------|------|
| gtgatcaagt | ttttaggcctt | tgagcaagtg | ttgaaaaatt | cgctcaccac | tttggctatg | 360 |
| gggggcgcta | agggggggag | cgatttttgac | cctaaaggga | agagcgagca | tgagatcatg | 420 |
| cgtttttgcc | aagcgttcat | gaatgaatta | taccgccata | ttggagccac | gactgatgtg | 480 |
| ccagctgggg | atattggagt | ggcgaaaga | gagattggct | atctgtttgg | gcaatacaaa | 540 |
| aaattagtca | atcgttttga | ggcggtattg | accggtaaag | gactcactta | tggagggagc | 600 |
| ttgtgcagaa | aagaagctac | cggttatggg | tgcgtgtatt | ttgctgaaga | aatgttgcaa | 660 |
| gaaaggaaca | gctcttttaga | gggtaagggt | tgacgcgttt | ctgggagcgg | gaatgtcgca | 720 |
| atztatacca | ttgaaaaatt | gcttcaaata | ggagctaaac | cggtaacggc | gagcgattct | 780 |
| aatggcatga | tttatgacaa | agacggcatt | gatttagagc | ttttgaaaga | aattaaagaa | 840 |
| gtgcgtcgtg | ggagatcaa | agaatacgct | ttagaaaaaa | agagcgcgga | atacacccca | 900 |
| acagaaaatt | accccaaaag | ggggaatgcg | gtgtggcatg | tgccttggtt | tgcggctttt | 960 |
| cctagtgcga | ccgagaatga | attgagcggt | ttagacgcca | aaaccctcct | ttctaattgg | 1020 |
| tgtaaatgcy | tggctgaagg | ggcgaacatg | ccctcaagca | atgaagcgat | tggattgttt | 1080 |
| ttgcaggcta | agattttctta | tggatataggc | aaggcggcta | atgctggggg | ggtgagcgtg | 1140 |
| agcggcttgg | aatgggcaca | aaacgcaagc | atgcaccctt | ggagttttga | agtgggtgat | 1200 |
| gcgaaattgc | accatattat | gaaagagatt | tataagaatg | tctctcaaac | cgctaagag | 1260 |
| tttaaagacc | ctactaattt | tgtattaggg | gccaatatcg | ctggtttttag | aaaagtagcg | 1320 |
| tctgcgatga | tagcgcaagg | gggt | | | | 1344 |

Seq ID 37

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|-------------|------|
| atggatgatt | tgcaagaaat | aatggaagac | ttcttgattg | aagcctttga | aatgaacgag | 60 |
| caattggatc | aggatttagt | ggaattggag | cataaccctg | aggattttga | cttgctcaat | 120 |
| cgcattttta | gagtgcgcca | caccattaaa | ggctctagct | cgttttttgaa | tcttaacatt | 180 |
| ctcacgcacc | tcacgcacaa | catggaagat | gtcttgaatc | gcgccagaaa | gggcgaaatc | 240 |
| aaaatcacgc | ctgatattat | ggatgtcgtg | ttgcgtccca | ttgatttgat | gaaaaccctg | 300 |
| ctcgtaacga | ttagagatac | cgctctgat | actaataacg | gcaaggaaaa | cgagattgaa | 360 |
| gaagcgggtca | aacaacttca | agccatcacg | agtcaaaatt | tagagagtgc | taaagaaagg | 420 |
| actacagaag | ccccccaaaa | agaaaataaa | gaagagacga | aagaagaagc | gaaagaagaa | 480 |
| aataaagaaa | acaaggcaaa | agcccctact | gcagaaaaa | catcaagcga | taaccgccta | 540 |
| gccgatgagc | cggatttgga | ttacgctaac | atgacgcgtg | aagaagtgga | agcagagatt | 600 |
| gaacggctgc | tgaacaaacg | ccaagaagcc | gataaagaac | gaagagctca | aaaaaaacaa | 660 |
| gaagccaaac | ccaaacaaga | agttacccca | acaaaagaaa | cccccaagc | ccctaaaacc | 720 |
| gaaactaaag | ctaaggctaa | agccgatact | gaagaaaata | aagccccctc | tattggcgtg | 780 |
| gagcaaaccc | ttagggtgga | tgtgcgcgcg | ttggatcact | tgatgaattt | aatcggcgag | 840 |
| cttgtgttag | ggaagaatcg | cttgatcagg | attgatagcg | atgtggaaga | acgtctatgat | 900 |
| ggggaaaagt | tttttagagg | attaaccag | gtggctctct | ctatttcagc | ggtaaccgaca | 960 |
| gacttgcagc | ttgcgggtgat | gaaaacacgg | atgcaaccag | tgggtaagggt | gttcaataaaa | 1020 |
| ttccctcgca | tggtaaggga | tttgagccgg | gaattaggca | agagcattga | attgatcatt | 1080 |
| gagggcgaa | aaaccgaatt | agacaaatcc | attgtagaag | agattggcga | tccgctcatt | 1140 |
| cacattatcc | gcaactcatg | cgatcatggg | attgagcctt | tagaagaaag | acgaaagcct | 1200 |
| aacaagcctg | aaaccggtaa | agtgcatttg | agcgcgtata | atgagggtaa | ccacattgtg | 1260 |
| attaaaatct | ctgatgatgg | caaagggtta | gaccctgtga | tgcttaaaga | aaaagcgatt | 1320 |
| gaaaaagggg | tgattagcga | aagagacgct | gaaggcatga | gcgataggga | agcgtttaac | 1380 |
| ctcatttttca | agccaggcct | ttctaccgca | aaagtcgttt | ccaatgtctc | aggcaggggg | 1440 |
| gttggcatgg | atgtgtgtaa | aaccaatatt | gaaaagctca | atggggatcat | tgaaattgat | 1500 |
| tcagaagtgg | gggtaggcac | gactcaaaag | cttaaaatcc | ctctcacttt | ggctatcatt | 1560 |
| caagctttac | tcggtggcgt | tcaagaagaa | tattacgcta | tcccgctttc | ttcagtgtta | 1620 |
| gaaaccgtgc | gcatcagcca | ggatgaaatt | tacaccgttg | atggcaagag | cgtgttgctg | 1680 |
| ttgagagatg | aggtgctttc | tttgggtgcg | ctttctgata | tttttaaagt | agatgctatt | 1740 |
| ttggaatcca | actcagatgt | gtatgtggtt | atcattggct | tggctgatca | aaaaattggc | 1800 |
| gtgatcgtgg | attattttaat | cggtcaagaa | gaagtgggtca | ttaaatcttt | aggttactat | 1860 |
| cttaaaaaaca | ctagaggcat | tgctggtgct | acggtgagag | gcgatgggaa | aatcacccct | 1920 |
| attgtagatg | tgggggcat | gatggatatg | gcaaaaagca | tcaagggtcaa | tatcactacc | 1980 |
| ttaatgaacg | aatccgaaaa | cacgaagagc | aaaaattccc | ctagcgatta | tattgtctta | 2040 |
| gcgattgatg | acagcagcac | ggatagagcg | attatccgca | aatgttttaa | accatttagg | 2100 |
| atcacgcttt | tagaggcgac | taacgggtta | gagggttag | aaatgcttaa | aaatggcgat | 2160 |
| aagattccgg | acgctatttt | agtggatatt | gaaatgccta | aaatggacgg | ctacactttc | 2220 |
| gcttctgaag | tgcgtaaata | caataaatte | aaaaacctgc | ctttgatcgc | agtaaccagt | 2280 |
| cgggtaacta | aaaccgatag | gatgcgtggc | gttgaatccg | gcatgactga | atacatcacc | 2340 |
| aaaccttata | gcggtgaata | tttaaccacc | gtagtgaagc | gcagcattaa | attagaagga | 2400 |
| gaccaatcg | | | | | | 2409 |

Seq ID 38

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|-----|
| gtgatagagc | ttgacattaa | cgctagcgat | aaatcgctct | cacacagagc | cgttattttt | 60 |
| agcctgctcg | ctcaaaaacc | ttgtttcggtg | cggaattttt | taatgggaga | agattgttta | 120 |
| agctcttttag | aaatcgctca | aaatttaggg | gctaaagtgg | aaaataccgc | caaaaattct | 180 |
| tttaaaatca | cacccccaac | aactataaag | gagcctaaca | agatttttaa | ttgcaacaat | 240 |
| tctggcacaa | ccatgcgttt | atacagcggg | cttttaagcg | ctcaaaaagg | gctttttgtt | 300 |

| | | | | | | |
|------------|-------------|------------|-------------|------------|-------------|------|
| ttaagcgggg | acaatttcctt | aaacgcacgc | cccatgaaaa | gaatcattga | gcctttgaag | 360 |
| gcttttgggg | caaaaaatctt | agggagagag | gataaccatt | tcgccccctt | agtgatctta | 420 |
| gggagtcctg | taaaagcttg | ccattatgaa | agccctatcg | cttcagctca | agtcaaaagc | 480 |
| gcttttattt | taagcgctt | acaagctcaa | ggcgcaagca | cttataaaga | aagcgagctt | 540 |
| agccgtaacc | acacagaaat | catgcttaaa | agtttgggag | ctgatattca | caatcaagac | 600 |
| ggcgttttta | aaatttcacc | cctagaaaaa | cccctagaag | cctttgattt | tacgatagct | 660 |
| aatgatccgt | ctagcgcggt | ttttttcgcc | ctcgcttgcg | cgattacgcc | aaaaagccgc | 720 |
| cttcttttaa | aaaatgtctt | gctcaacccc | actcgcatag | aagcttttga | agttttgaaa | 780 |
| aaaaaggggt | cttccataga | gtatgcgatt | cagtcctaaag | atttagaaat | gattggcgat | 840 |
| atttatgtag | agcatgcccc | tttaaaagcg | atcaatatgt | atcaaaatat | cgccagtctt | 900 |
| attgatgaaa | tccccgcttt | aagtatcgct | atgctttttg | caaaaggcaa | aagcatgggt | 960 |
| aaaaacgcta | aagattttacg | agctaaagaa | agcgacagga | ttaaagcggt | tgtttctaata | 1020 |
| ttcaaagctt | taggggattga | gtgcgaagag | tttgaagatg | ggttttatgt | agagggatta | 1080 |
| gaagatataa | gccattataa | acagcgcttt | tctaggatta | agccccctt | tatcaaaagc | 1140 |
| ttcaatgacc | acaggattgc | gatgagtttt | gctgttttaa | ctttagcgtt | gccttttagaa | 1200 |
| attgataatt | tagaatgcgc | aaacatttct | ttcccgcaat | tcaaacacct | actcaatcaa | 1260 |
| ttcaaaaaag | ggagtcttaa | tggaat | | | | 1287 |

Seq ID 39

| | | | | | | |
|-------------|-------------|------------|------------|-------------|-------------|-----|
| ttggatatctt | tagatttgaa | caaagcgcaa | gcggtgcaac | aaaatgaaca | agaggtagag | 60 |
| gataaagagc | gagagtctaa | agagccggtg | gttttagaag | atttgagcgc | tttagcgtgg | 120 |
| cttgaattag | aagagttag | ccgcctttca | gggcttccta | aagaaaggat | tttggaaatta | 180 |
| gtgaatcttg | gtaaaatcaa | gagcaaaata | agcagcaaca | agcttttaata | tgatgcgagc | 240 |
| agcgggacaa | acgctttaat | caaaaaggta | gaaaaatagt | tgatttctat | ggatatgaac | 300 |
| gggcttctct | tacgaacctgt | gtttgtggaa | aagaccatta | acacgatttt | aaacttgcat | 360 |
| gataaggtca | ttggcgctaa | agatgaaacg | atttcagcct | ttaaaaatga | aaacatgttt | 420 |
| ttaaaagacg | ctttaatctc | tatgcaagaa | gtctatgaag | aagataaaaa | aaccattgat | 480 |
| cttttgcgcg | atgaactcaa | tcaagcgaga | gaagaaattg | aatttatgaa | gaggaaatac | 540 |
| cgcttgatgt | gggggaaagt | cgctgacatg | agcagcgtga | ataaaaaag | | 588 |

Seq ID 40

| | | | | | | |
|-------------|--------------|-------------|-------------|-------------|-------------|------|
| atgatttttag | tattagattt | tgggagtcac | tacacacagc | tgattgctag | aagattgaga | 60 |
| gagagagggga | ttttatcacaga | aatagtcctt | ttttttgaaa | gcatagaaaa | cattcaaaaa | 120 |
| aaagccccca | aaggtttgat | tttgagtggtg | gggcccagcga | gcgtgtatgc | taaagacgct | 180 |
| tacaagccta | gtgggaaaat | ctttgatttg | aatgtgccga | ttttagggat | ttgctacggc | 240 |
| atgcagttat | tgggtgattt | ttttgggggg | gtagtgggtg | gtgcgaatga | gcaagaattt | 300 |
| ggtaaggctg | ttttagaaat | cactcaaaat | tctgtgattt | ttgaaggcgt | gaagattaaa | 360 |
| agccttgtgt | ggatgagcca | tatggataaa | gtcatagaac | tgccataaag | ctttactacc | 420 |
| cttgcaaaaa | gccctaattc | ccccattgc | gcgattgaaa | acggcaagat | ttttggcttg | 480 |
| caattccacc | cagaagtcgt | tcaaagcgaa | gaagggggta | agatttttaga | aaattttgcc | 540 |
| cttttagttt | gcggtgtgta | aaaaacttgg | gggatgcagc | atttcgctca | aagagaaatc | 600 |
| gcacgattga | aagaaaaaat | cgctaacgct | aagggtttgt | gcgcgggtgag | tgggggcggtg | 660 |
| gattctacgg | tggctcgctac | gctgttgac | agagccatta | aggataattt | gatcgctgtt | 720 |
| tttggtgatc | tggcttgtt | gcgtaaaaat | gaaaaagaaa | gggtgcaagc | gatgtttaag | 780 |
| gacttgaaaa | atccctttaa | cacgatagac | gctaagaag | tctttttgtc | taaattaaag | 840 |
| ggcgtgagcg | agcctgaatt | gaagcgaaaa | atcatcggtg | agacctttat | tgaagtgttt | 900 |
| gaaaaagaag | ccaaaaagca | ccatttataa | ggcaaaattg | aatttttagc | ccaaggcact | 960 |
| ttataccctg | atgtgattga | atccgtgagc | gttaaagggtc | cttcaaaagt | gatcaaaacc | 1020 |
| catcataatg | tgggcgagct | gcctgaatgg | atggatttta | aactcataga | gcctttaagg | 1080 |
| gagttgttta | aagatgaggt | gcgcttactg | ggtaaagaat | tgggcgttag | tcaggatttt | 1140 |
| ttaatgcgcc | acccttttcc | agggcctggg | cttgctgtaa | ggatttttagg | cgaaatcagt | 1200 |
| gagagtaaga | tcaaacgctt | gcaagaagcg | gattttatct | ttatagagga | acttaaaaaa | 1260 |
| gccattttgt | atgacaaggt | ttggcaagct | ttttgcgtgc | tgttgaatgt | caattctgtg | 1320 |
| ggggttatgg | gggataaccg | cacttatgaa | aacgctattt | gcttaagagc | ggtaaatgag | 1380 |
| agcgatggca | tgacggcgag | cttttcattt | ttagagcatt | cttttttaga | aaaggtttct | 1440 |
| aaccgtatca | ctaataaggt | gagcgggtatc | aatagggtgg | tgtatgacat | tacctctaaa | 1500 |
| ccaccaggaa | cgattgaatg | ggaa | | | | 1524 |

Seq ID 41

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| atgaaagtca | ataagggttt | taaatccgc | ttgtatccca | ctaaagaaca | acaagataag | 60 |
| ttgcaacact | gcttttttgt | ctataatcaa | gcttataata | ttggcttgaa | tgaactgcaa | 120 |
| gagcaatatg | aaaccaacaa | agattcacca | cctaagaaa | gaaaatacaa | aaaatcaagc | 180 |
| gaattagaca | atgcgatcaa | acaatgcttg | agagctaggg | acttgccctt | tagcgtgtg | 240 |
| atagcccaac | aagcacgcat | gaatgttgaa | agggctttta | aagatgcttt | taaagttaaa | 300 |
| aacagaggct | ttcctaaatt | caaaaactct | aaatccgcc | aacaatcttt | ttcgtggaac | 360 |
| aatcaaggct | tctctatcaa | agagagcgat | gatgagtgct | tcaagacatt | cactctgatg | 420 |
| aaaatgcctt | tactcatgcy | catgcataga | agacttcccc | ctaattttta | agtgaacaa | 480 |
| attagtatct | cttgagccca | tagaaaaatat | tttgtagct | ttagcgtgga | atacgaacaa | 540 |

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| gacattactc | ccataaaaaa | cactaaaaat | ggtgtggggc | tagatttgaa | tatccttgat | 600 |
| acagcttggt | cttgtgagat | aaacaacccat | gacaaactaa | cggactttaa | gcaataccaa | 660 |
| acagacatga | aagaattact | agggatagaa | atagatgaag | agctggatac | taaacgactt | 720 |
| atccctactt | attccaaatt | gtattcttta | aaaaataact | ctaaaaaatt | taaaagatta | 780 |
| caaagaaaac | aaagccgtag | gtgt | | | | 804 |

Seq ID 42

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|------|
| atggttagaaa | gcgcctttaa | atattgcaag | gaaaaagcca | tagacctttt | agtagggttt | 60 |
| gtgccaaaaa | cctattctat | ggcacaagag | tgcaatattt | taggcttgta | tgatgatgct | 120 |
| ttcattatta | ccaaacaaga | aaatctagta | ggcattatat | ccttacaagg | actaagctat | 180 |
| tctaatttaa | tgcaaaaaga | cttagagggc | tattttgatg | ctagacaaaa | tggtctcaac | 240 |
| accattagta | aagacattca | attaagaatt | gtggctaaaa | ggcgtaagga | atttatcaat | 300 |
| caaagtccaa | atattgacaa | tattttatgcc | aaagctatta | tcacacaatt | tgaaagcaag | 360 |
| ggaatctata | aaacagagta | tttttttagtg | tttgaacta | tcacttctaa | tgtcaagctc | 420 |
| ttctttgaaa | aaaagaaatt | ggaaatgact | acttcaatta | atgaagagtt | agaagaaagc | 480 |
| tctaaagaag | ataaacaaga | gaatgaaaat | agctccaatg | aaactcattc | aaacacaagc | 540 |
| tctaaaaaag | acaagaaaaa | caagttcaaa | aaaaagataa | ccttttagcac | caaaagtaaa | 600 |
| agagccttac | tcattcaaac | catagaaaga | gtaaaaaacg | ctcttaaaga | atttaaacc | 660 |
| actttactaa | attctaaaga | agtattaaat | ttctacgcag | aatacatcaa | tggcaaatat | 720 |
| atcgctttta | atcctaaatt | aaagcgatta | agcgatagct | atattgcata | taatgtgcat | 780 |
| tttaagaaag | attactttgt | cattgaattt | caaaatcaaa | acaccttttg | tgctgtgtgt | 840 |
| gggattaagg | cttatgagag | cgaagaaatt | tcttcgctcc | ctatatctac | tcttttacac | 900 |
| acccaaattg | aactagattt | aatctttcat | atccgctctt | tagggcaatt | tgaaagcctg | 960 |
| aattttttta | aaactaagaa | aaagctcacg | cttcttaaaa | tagtaaaagc | tgatattgat | 1020 |
| aattatatag | aattagtgc | agccaatcgt | ttgagcatgc | aagagtgtgc | tttaaactta | 1080 |
| gttataagg | ctaaaagtaa | agctaaatta | gacaagtctt | taaaagagat | tttatccttg | 1140 |
| cttaataatg | ctggactagg | cagtgttaca | gaaactatag | ggctaaaacc | atcttatttt | 1200 |
| tcatctcttc | caaataacgc | caatatcaac | cttagaatga | gacatcaaac | ttcccaagtc | 1260 |
| atagcatctt | tgattttgtt | tgagaaaaat | aatacaggtt | ttagagcaaa | ttcttggggg | 1320 |
| gatatgccct | tatctgtgtt | taagaacct | gaccatagcc | cttatattgt | taattttcat | 1380 |
| aatcaagaag | tcaaacataa | gggcgtgtta | gccacacatg | tcgcacgagt | agtgggacat | 1440 |
| accatgatta | taggagcaac | aggtgctggt | aaaaccacac | tcattagcta | tttgatgatg | 1500 |
| agtgccttaa | aatattctaa | cattgatatt | ttagctcttg | atagactaaa | tggtttgtat | 1560 |
| tcctttacca | agtattttga | tgggatttat | aatcaaggcg | aaaactttca | tattaaacct | 1620 |
| ttttcattag | aagatagcgc | aactaataga | gcctttttat | tgcaatttta | tgcccaaatg | 1680 |
| gcaaaagtgg | atagtattga | tgaccataag | gataaagtag | aagatagaac | agccctttta | 1740 |
| aatgctattg | atacgatgta | tagaaattat | aacgatgaag | tcaaacaagc | caaattttagc | 1800 |
| aaccaagaat | taccctctcc | ttttgattta | aaagagtttg | tcaatgccat | tgctaaaacc | 1860 |
| aatacagaca | ttttagatag | tagttttgaa | gactatttaa | aatcttccct | attttctagc | 1920 |
| cgaatgggata | gtctagattt | taaaactcgt | attagcacca | taaaatccga | tagcatttta | 1980 |
| cataatgatg | atgacgctgg | gcttttagcc | tactatgtct | ttcataagat | gattgacaga | 2040 |
| gccttaaaaa | tcaatcgtgg | gtttttatgc | tttattgatg | agtttaagtc | ttacgctcaa | 2100 |
| aatgaaatga | tgaataaaaa | aatcaatgaa | atcattactc | aagctagaaa | ggctaagggg | 2160 |
| gtgattgttc | tagccttaca | agacattaac | caactaagcg | aagtgaagaa | cgctcaaaagc | 2220 |
| tttataaaaa | atatggggca | attgattttg | tatcccaaaa | gaaatattga | taccaagat | 2280 |
| ttaaacgata | aatttggtcat | tagactaagc | gatacagaaa | aacatttttt | agaaaacacc | 2340 |
| gccgttaaatg | aatacaaatg | cttactcaaa | aacatgaatg | atggctcatc | taacattata | 2400 |
| gatgtgagcc | taagttcttt | gggtaattac | ctacaaatct | ttagctctaa | ttctagcatg | 2460 |
| gtagaacaca | ttgataatct | cattaagcat | taccctaaaa | cttggcgaga | agtctttgtg | 2520 |
| agtaacaaac | acgaaaattt | tgatgacaaa | aaacacttag | aaaagggtgct | taaa | 2574 |

Seq ID 43

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-----|
| atgaaaaata | ttagaaatat | cgctgtaatc | gcgcatgttg | atcatgggaa | aaccactcta | 60 |
| gtagatggct | tactttctca | atctggcaca | tttagtgaga | gggaaaaagt | ggatgaaagg | 120 |
| gtgatggata | gcaatgattt | ggaaagagaa | agagggatta | ctatcctgtc | taaaaacacc | 180 |
| gctattttatt | acaaagacac | taaaatcaat | atcattgaca | ctcccgggca | tgctgatttt | 240 |
| gggggccaag | tggagcgctg | tttaaaaatg | gtggatgggg | tggtgctttt | agtggacgct | 300 |
| caagaagggg | tcattgcctca | aactaaattc | gtggttaaaa | aggctttgag | ttttgggatt | 360 |
| tgccctattg | tgggtggtgaa | taaaattgat | aggcctgccg | ctgaaccgga | cagagtgggtg | 420 |
| gatgaagttt | ttgacttggt | cgtagccatg | ggggctagcg | ataagcaatt | ggatttccct | 480 |
| gtgggtgatg | ccgcgcacg | agatggctat | gcgatgaaaa | gttttagacga | tgaaaagaaa | 540 |
| aatttagagc | ctttgtttga | aacgatttta | gagcatgtgc | caagccctag | cgggagcgctt | 600 |
| gatgagcctt | tgcaaatgca | aatttttcacg | cttgattatg | acaattatgt | gggcaaaatc | 660 |
| gggtatcgcta | gggtgtttta | tggctcggtt | aaaaagaatg | aaagcgtgct | gttgatgaaa | 720 |
| agcgatggga | gtaaagaaaa | tggcgtatc | actaagctta | taggtttttt | agggtggct | 780 |
| aggactgaga | ttgaaaacgc | ttatgcgggc | gataattgtag | cgattgccgg | gtttaatgca | 840 |
| atggatgtgg | gcgatagcgt | cgttgatcct | gctaacccca | tgcccttaga | tcccatgcat | 900 |
| ttagaagagc | ctacgatgag | cgtgtatttt | gctgtcaatg | attcacctt | agccgggtta | 960 |

| | | | | | | |
|------------|-------------|-------------|-------------|------------|------------|------|
| gaaggaaagc | atgttactgc | taataaattg | aaagacaggc | tcttaaaaga | aatgcaaacc | 1020 |
| aatatcgcta | tgaatgcga | agaaatgggc | gagggcaagt | ttaaagtga | tgggcgtggg | 1080 |
| gaattgcaaa | tcactathtt | agctgaaaac | ttgcgcgctg | aagggtttga | athtagcatt | 1140 |
| tcacgccttg | aagtcacat | taaagaagaa | aatggcgctta | aatgcgagcc | ttttgagcat | 1200 |
| ttagtattg | acacgcccc | agattttagt | ggggctatca | ttgagagatt | gggcaaaaga | 1260 |
| aaagctgaga | tgaagcgat | gaatcccatg | agtgatggct | atacaagatt | agaatttgaa | 1320 |
| attcctgcaa | gagggcctat | cggttatagg | agcgagtttt | taaccgacac | caagggcgaa | 1380 |
| ggcgtgatga | atcatagctt | tttagaattc | cgccctttca | gcgggagcgt | ggaatcgcg | 1440 |
| aaaaatgggg | cgctaactag | catggaaaat | ggcgaaagcga | cgcctttttc | ccttttcaat | 1500 |
| atccaagaaa | gagggacgct | ttttatcaac | ccccaaacga | aggtttatgt | gggcatggtc | 1560 |
| attggcgagc | acagccggga | taatgattta | gatgtcaatc | ctattaaatc | caagcattta | 1620 |
| accaacatga | gagcgagcgg | gagcgatgat | gcgatcaaac | tcaccccgcc | taggactatg | 1680 |
| gtgttagaaa | gagcggttaga | atggattgaa | gaagatgaga | ttttggaagt | taccccttg | 1740 |
| aatttaagga | tcaggaaaaa | gatttttagac | cctaacatga | ggaaaagggc | gaaaaaa | 1797 |

Seq ID 44

| | | | | | | |
|-------------|-------------|------------|------------|------------|-------------|-----|
| atgaaaaaaa | ttggtttgag | cttgtgtttg | gttttgagtt | tgggtttttt | aaaagcccat | 60 |
| gaagtgcgag | ctgaagagat | tgcggatatt | ttctacaaac | tcaacgccaa | agagcctaaa | 120 |
| atgaaaatca | accacactaa | gggtgtttgc | gctaaaggcg | tggttcctcc | taatgcgcaa | 180 |
| gcaaaaaagg | attttagatg | gccattactc | aatgaaaaag | aaatccctgc | gtctgtaagg | 240 |
| tattcttttag | gaggcgtggc | aatggacgat | aaaagcaaag | ttaggggaat | ggcgttaaaa | 300 |
| ttagaaaacc | aaaacgctag | ctggacaatg | gtgatgctca | atacagaaat | caattttgcc | 360 |
| aaaaacccta | acgaattcgc | ccaatttttt | gagatgagaa | tccttaaaaa | tggcaagggtg | 420 |
| gatgaagcaa | gaatcaaaaa | gctttatgaa | gaagtcctct | cttataggaa | ttttgcgcgt | 480 |
| tacacaaaaa | cgatagggat | cagctcaagc | gtggctaaca | cgccttatta | cagcgtgcat | 540 |
| gcgttcaggt | ttaaagacaa | aaaagggaag | ttattaccgc | caagatggaa | atttgtgcct | 600 |
| aaagagggca | ttaaagtatct | taacccccaa | gaattaaagc | aaaaagattc | aaattatctg | 660 |
| ctctctgcat | tccaacaaca | ccttaaaact | aagcccatag | aataccaaat | gtatctgggtg | 720 |
| tttgcgataa | aaaatgatgc | cactaacgac | acgacgcgc | tttggaagg | taaacacaag | 780 |
| gaattatttg | tggtggacct | gaaagttaga | aaatacgaag | gaatgggttg | caataaagat | 840 |
| gtgtattttc | cagctgatct | ccccaaagc | gtagaagccc | ctactgatcc | cttattccaa | 900 |
| atcaggaatg | aagtttatgg | gatcactttt | agcagaaggc | aa | | 942 |

Seq ID 45

| | | | | | | |
|-------------|-------------|------------|-------------|------------|------------|------|
| atgttaaggc | ttttgatagg | acttcttcta | atgagtttta | taagcttgca | atcagcctct | 60 |
| tggcaagaac | ccttaagagt | gagtatagaa | tttgtggatt | tgcttaaaaa | aatcattcgt | 120 |
| tttccggctc | atgatttgca | agtgggggag | tttggttttg | tcgttactaa | actttcagat | 180 |
| tatgaaatcg | ttaattctga | agtggtcatt | attgcccgtg | aaaatggcgt | cgcaacggct | 240 |
| aaattcagag | cgtttgagtc | tatgaaacaa | aggcattttac | ccactccaag | aatggctcgt | 300 |
| agaaaggggtg | atttagtcta | ttttaggcaa | ttcaacaacc | aagcgttttt | aatcgctcct | 360 |
| aatgatgaac | tctatgagca | aatcagagcg | actaacaccg | atattaattt | tattagttct | 420 |
| gatttggttg | ttactttttt | gaatgggttt | gacccaaaaa | tcgctaattt | aaggaaagcg | 480 |
| tgcaacgttt | atagcgtggg | ggtgatttat | attgtaacca | ccaacacgct | caatatttta | 540 |
| agttgtgaga | gttttgaaat | tttagaaaaa | agagagctgg | atacaagcgg | cgttactaaa | 600 |
| acttccacgc | cgtttttttc | taggggttag | ggtattgatg | caggcacgct | agggaaactt | 660 |
| ttttcaggca | gtcagctctaa | aaattacttc | gcttactatg | acgctttagt | gaagaaagaa | 720 |
| aaacgcaaaag | aagtgcggat | taaaaagagg | gaagaaaaga | ttgattctag | agaaattaaa | 780 |
| cgagaaatca | agcaagaggc | cattaaagag | cctaaaaaag | ccaatcaagg | cacacaaaac | 840 |
| gctcctactt | tagaagagaa | aaactaccaa | aaagcagagc | gcaaacttga | tgctaaagaa | 900 |
| gaaaggcggtt | atttgagaga | tgaaaggaaa | aaagccaaaag | ccaccaaaaa | ggctatggaa | 960 |
| tttgaagaaa | gagaaaaaga | gcatgatgaa | agggacgaac | aagagactga | aggaagaaga | 1020 |
| aaagccttag | aatggatata | aggcgataaa | aaagaagaaa | gagtcacacc | caaagaaaat | 1080 |
| gagcgagaaa | tcaagcaaga | agccattaaa | gagccaagtg | atggaaataa | cgccacccaa | 1140 |
| caaggcgaaa | aacaaaaacgc | tcctaaagag | aacaacgctc | aaaaagaaga | gaataaacca | 1200 |
| aattctaaaag | aagaaaaacg | ccgcttgaaa | gaagaaaaga | aaaaagccaa | agccgaacaa | 1260 |
| agagcgagag | aatttgaaac | aagagcgaga | gagcatcaag | aaagagatga | aaaagagcct | 1320 |
| gaagagcgaa | gaaaggcgct | agaagcgggt | aaaaaa | | | 1356 |

Seq ID 46

| | | | | | | |
|------------|-------------|------------|-------------|------------|------------|-----|
| atgtttaaag | atttttatcg | caccaccctc | tcttttttaa | agcctttatt | gcttttacta | 60 |
| gttttattat | tgccgttttc | actttgtata | gctgatgaat | atattagcat | aagtgatgat | 120 |
| tgggatgaaa | ttgtgcgaaa | tcataagaca | tattattttg | aaaatgggtt | agaccatttt | 180 |
| aatcaaggcc | aataaccagca | agccttttaa | gatttttagat | tggcgcaaga | atacagcatc | 240 |
| gggcttggca | gtgttttatt | agccaaaatg | tattttggag | gaaagggcgt | gaaagtggat | 300 |
| tacaaaaaag | cacaatttta | tgcagaaaac | gctatcaaa | ggatggggag | cggattgtta | 360 |
| gggggtgctc | ttatttttag | acgcatgcaa | gcagaaggct | tagggatgaa | aaaggatttg | 420 |
| aaacaagcgc | tcaagactta | taggcattgt | gttcgcatgt | tttctaataa | aagcacaat | 480 |
| tttgctaaca | attttagatt | accaaactt | gcggaattta | ctagtatgct | tattggatcg | 540 |

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| cgattcattg | atctttcagg | tttgagcgcg | aatcctataa | aatttgga | gaaatttgga | 600 |
| atacttggtta | agaaatccac | tcaaatacaa | gataagacac | ttctttggga | agatattgct | 660 |
| gaaatttcaa | gcaatattac | tttactcaaa | caacaaatgg | gggagatcct | ttataggatt | 720 |
| gggatcgctt | ataaagaagg | gcttggcact | agaaagaaaa | aggacagggc | taaaaaatc | 780 |
| ctgcaaaaat | ccgcagaatt | tggttatgaa | aaagccatgg | aagctctg | | 828 |

Seq ID 47

| | | | | | | |
|------------|-------------|-------------|------------|-------------|-------------|-----|
| atgactgaag | acagattgag | tgcagaagat | aaaaagtctt | tagaagtaga | aagagcttta | 60 |
| aaagaagcgg | cattaaatcc | tctaaggcat | gctactgaag | aacttttttg | tgatttttta | 120 |
| aaaatggaaa | atatcactga | gatttggttac | aatgggaaca | agggtgtatg | ggtttttaaaa | 180 |
| aataatggcg | aatggcaacc | atttgatgtg | agagacagga | aagccttttag | cctgtctcgt | 240 |
| ttaatgcatt | ttgctcgggtg | ttgtgcaagt | tttaagaaaa | aaacaataga | caactatgaa | 300 |
| aatcctatct | tgagcagcaa | tttagcgaat | ggtgaaaggg | tgagattgt | cctttcccct | 360 |
| gttacagtta | atgatgaaac | catttccata | tccataagga | tacctagcaa | aacaacctat | 420 |
| cctcatagct | tctttgaaga | gcaagggttt | tataatctac | tagacaacaa | agaacaagcg | 480 |
| atcagcgcg | ttaaagatgg | tattgctatt | ggtaaaaatg | tgattgtttg | tggtggcaca | 540 |
| ggaagcggta | aaacgactta | tatcaaaagc | atcatggagt | ttatccctaa | agaagaaagg | 600 |
| atcatatcca | ttgaagacac | cgaagagatt | gtattcaaac | accacaaaaa | ctacacacag | 660 |
| cttttttttg | tggggaatat | cacctctgct | gattgcttaa | agtcattgtct | gagaatgcgg | 720 |
| cctgatagaa | tcatttttagg | ggaactcaga | agcagtggag | catacgattt | ttataatgtg | 780 |
| ctttgtagcg | gtcataaagg | cacactaacc | actctgcatg | cagggagcag | tgaagaagcg | 840 |
| tttatccggt | tggccaacat | gagttcatct | aatagcgag | caaggaatat | caagtttgaa | 900 |
| agtcttattg | agggtcttaa | agatttgatt | gatatgattg | tccatatcaa | ccaccacaaa | 960 |
| cagtgtgatg | aatttttatat | caaacacagg | | | | 990 |

Seq ID 48

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|------|
| atgaatgaag | aaaacgataa | acttgaaact | tctaaaaaag | cccaacaaga | ttcaccctcaa | 60 |
| gatttatcca | atgaagaagc | aacagaagcc | aatcattttg | aaaatctttt | aaaagaatcc | 120 |
| aaagaagcgt | cagatcatca | tcttgacaac | cccacagaaa | ctcaaaccct | ttttgatgga | 180 |
| gacaagtcag | aagaaaacca | aactcaaatg | gattctgaag | gtaatgaaac | ttcagaatct | 240 |
| agcaatggca | gtctagcaga | caagttattc | aaaaaagcca | gaaaattagt | tgataataaa | 300 |
| aaacctttca | ctcagcaaaa | gaatttagat | gaagaaaccc | aagaactgaa | cgaagaagac | 360 |
| gatcaagaaa | ataatgagta | tcaagaagaa | actcaaagcg | acttaattga | tgatgaaact | 420 |
| tctaaaaaaa | cccaacaaca | tccaccctaa | gatttatcca | atgaagaagc | aacagaagcc | 480 |
| aatcattttg | aaaatctttt | aaaagaatcc | aaagaagcgt | cagatcatca | tcttgacaac | 540 |
| cccacagaaa | ctcaaaccct | ttttgatgga | gacaagtcag | aagaaaccct | aactcaaatg | 600 |
| gattctgaag | gtaatgaaac | ttcagaatct | agcaatggca | gtctagcaga | caagttattc | 660 |
| aaaaaagcca | gaaaattagt | tgataataaa | aaacctttca | ctcagcaaaa | gaatttagat | 720 |
| gaagaaaccc | aagaactgaa | cgaagaagac | gatcaagaaa | ataatgagta | tcaagaagaa | 780 |
| actcaaacgg | acttaattga | tgatgaaact | tctaaaaaaa | cccaacaaca | ttcaccctcaa | 840 |
| gatttatcca | atgaagaagc | aacagaagcc | aatcattttg | aaaatctttt | aaaagaatcc | 900 |
| aaagaagcgt | cagatcatca | tcttgacaac | cccacagaaa | ctcaaaccct | ttttgatgga | 960 |
| gacaagtcag | aagaaataac | tgacgactct | aacgatcaag | agattatcaa | aggaagcaaa | 1020 |
| aagaaatata | tatttggtgg | cattgtagtc | gctgttctta | tcgtgattat | tttattttct | 1080 |
| agaagcattt | ttcactactt | catgcctttg | gaagataaaa | gctctcggtt | tagcaaaagc | 1140 |
| aggaatcttt | atgtcaatga | tgaaatccaa | ataaggcaag | agtataaccg | attgctgaaa | 1200 |
| gaacggaatg | aaaaaggcaa | tatgatcgat | aagaatcttt | tcttcaatga | cgatcccaat | 1260 |
| agaaccttat | acaactattt | gaatattgca | gaaattgagg | acaaaaacc | gttgagagcc | 1320 |
| ttttatgaat | gtattagtaa | tggtggcaac | tatgaagaat | gtttgaagct | tatcaaaagc | 1380 |
| aaaaaacttc | aagatcagat | gaaaaagact | ctagaggctt | ataacgactg | catcaaaaat | 1440 |
| gccaaaactg | aagaagaaag | gatcaagtgt | ttagatttaa | tcaaagatga | aaacctaata | 1500 |
| aaaagcttac | tgaaccaaca | aaaagttcaa | gtggcgctag | attgtttgaa | aaacgctaaa | 1560 |
| accgatgaag | aacgaaacga | gtgcctaaaa | ctcataaatg | accctgagat | tagagagaaa | 1620 |
| ttccgtaagg | aattagagct | tcaaaaagag | cttcaagagt | ataaggattg | tatcaaaaac | 1680 |
| gccaaaacag | aagctgagaa | aaacaaatgc | ttgaaaggct | tgtctaaaga | agctatagag | 1740 |
| agattgaaac | agcaagcgct | agattgtttg | aaaaacgcta | aaaccgatga | agaacgaaac | 1800 |
| gagtgcctga | aaaatattcc | ccaagacttg | caaaaagaa | tattagctga | tatgagcgct | 1860 |
| aaggcttaca | aggattgcgt | atcaaaaagc | agaaatgaaa | aagagaaaca | agaatgcgag | 1920 |
| aaattgctca | cgctgaagc | gaggaaaaag | tatgaacaa | aggttctaga | ttgtttgaaa | 1980 |
| aacgctaaaa | ccgatgaaga | acgaaaaaag | tgtttgaaag | atctccctaa | agacttacaa | 2040 |
| agcgatattc | tagccaaaga | gagcctgaaa | gcttataaag | actgcgtatc | tcaagccaaa | 2100 |
| accgaagctg | agaaaaaaga | atgcgagaaa | ttactcacc | ctgaagcgaa | aaaactttta | 2160 |
| gaagaagaag | ccaaagagag | cgtaaaggct | tatttggatt | gcgtatctca | agccaaaacc | 2220 |
| gaagctgaga | aaaaagaatg | cgagaaatg | ctcaccctg | aagcgaaaaa | aaagttagaa | 2280 |
| gaagctaaaa | aaagcgtaa | agcttacttg | gattgcgtat | caagagctag | gaatgaaaaa | 2340 |
| gagaaaaaag | aatgcgagaa | attgctcacc | cctgaagcga | aaaaactttt | agagcaacaa | 2400 |
| gcactagatt | gtttgaaaaa | cgctaaaacc | gataaagaac | gaaaaaagtg | tttgaaagat | 2460 |
| ctccctaaag | acttgcagaa | aaagggttta | gctaaagaaa | gcgttaaagg | ttacttggat | 2520 |

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| tgcgatatctc | aagccaaaac | tgaagctgag | aaaaaagaat | gcgagaaatt | actcaccctt | 2580 |
| gaagcgagaa | aactttttaga | agaagctaaa | aaaagcgtaa | aggcttattt | ggattgcgta | 2640 |
| tctcaagcca | aaactgaagc | tgagaaaaaa | gaatgcgaga | aattactcac | ccctgaagcg | 2700 |
| agaaaacttt | tagaagaaga | mgccaaagag | agcgtaaag | cttacttggg | ttgcttatct | 2760 |
| caagccaaaa | acgaagctga | gaaaaaagaa | tgcgagaaat | tgctcaccct | tgaatcgaaa | 2820 |
| aaaaaggttag | aagaagctaa | aaaaagcggt | aaggcttatt | tggattgctg | atctcaagcc | 2880 |
| aaaaccgaag | ctgagaaaaa | agaatgcgaa | aaattgctca | cgctgaagc | gaaaaaactt | 2940 |
| ttagagcaac | aagcgctaga | ttgtttgaaa | aacgctaaaa | ccgaagctga | taaaaaaagg | 3000 |
| tgtgtcaaa | atctccctaa | agacttgag | aaaaaggttt | tagccaaaga | gagcctgaaa | 3060 |
| gcttataaag | actgctatc | aaaagctagg | aatgaaaaag | agaaaaaaga | atgcgagaaa | 3120 |
| ttactcacc | ctgaagcgaa | aaaactttta | gaagaagcta | aaaaaagcgt | taaggcttac | 3180 |
| ttggattgctg | tatctcaagc | caaaactgaa | gctgagaaaa | aagaatgcga | gaaattactc | 3240 |
| accctgaag | cgagaaaact | cttagaagaa | gctaaagaga | gcgttaaagc | ttataaagac | 3300 |
| tgcgatatcaa | aagctaggaa | tgaaaaagag | aaaaaagaat | gcgagaaatt | actcacgctt | 3360 |
| gaagcgaaaa | aactttttaga | gcaacaagt | ctagattgtt | tgaaaaacgc | taaaaccgaa | 3420 |
| gctgataaaa | aaaggtgtgt | caaagatctc | cctaaagact | tgcaaaaaaa | ggtttttagct | 3480 |
| aaagagagcg | ttaaggctta | tttggactgc | gtatcaagag | ctaggaatga | aaaagagaaa | 3540 |
| aaagaatgctg | agaaattgct | caccctgaa | gcgaaaaaac | ttttagaaga | agccaaagag | 3600 |
| agtcttaaa | cttataaaga | ctgcctctct | caagctagaa | atgaagaaga | aaggagagct | 3660 |
| tgcgagaaac | tactcacgct | tgaagcgaga | aaactcttag | agcaagaagt | taagaaaagc | 3720 |
| attaaggctt | atttggactg | cgtatcaaga | gctaggaatg | aaaaagagaa | aaaagaatgc | 3780 |
| gagaaattac | tcacgcctga | agcgagaaaa | tttttagcga | agcaagtgtc | aaattgtttg | 3840 |
| gaaaaagctg | gaaatgaaga | agaaaagaaa | gcattgtctta | aaaatctccc | taaagactta | 3900 |
| caggaaaaata | tttttagctaa | agagagtctt | aaagcttata | aagactgcct | ctctcaagct | 3960 |
| agaaatgaag | aagaaaggag | agcttgcgag | aaactactca | cgctgaagc | gagaaaactc | 4020 |
| ttagagcaag | aagcttaagaa | aagcgtaag | gcttatttgg | actgcgtatc | aagagctagg | 4080 |
| aatgaaaaag | agaaaaaaga | atgcgagaaa | ttactcacgc | ctgaagcgag | aaaattttta | 4140 |
| gcgaaagaac | tccaacaaaa | agataaagcg | atcaagatt | gcttgaaaaa | cgccgatcct | 4200 |
| aacgcacagag | cggctatcat | gaagtgtttg | gatggtttga | gcgatgaaga | gaagctcaaa | 4260 |
| tacctgcaag | aagctagaga | aaagcggttt | gcggattgtt | tggttatggc | taaaaccgat | 4320 |
| gaagaaaaaa | ggaaatgcca | aaacctttat | agcgatttga | tccaagaaat | ccaaaataaa | 4380 |
| aggacacaaa | acaaacaaaa | tcaattgagt | aaaacagaaa | ggttgcatca | agcaagcgag | 4440 |
| tgcttgggata | acttagatga | ccctactgat | caagaggcca | tagagcaatg | tttagagggc | 4500 |
| ttgagcgata | gtgaaagggc | gctaattcta | ggaatttaac | gacaagctga | tgaagtggat | 4560 |
| ctgatttata | cgcatctaag | aaaccgtaaa | acatttgata | acatggcggc | taaaggttat | 4620 |
| ccattgttac | caatggattt | caaaaatggc | ggcgatattg | ccactattaa | cgccactaat | 4680 |
| gttgatgcgg | acaaaatagc | tagcgataat | cctattttatg | cttccataga | gcctgatatt | 4740 |
| gccaaagcaat | acgaaacaga | aaaaaccatt | aaggataaga | atttagaagc | ttaattagct | 4800 |
| aaggctttag | gtggcaataa | aaaagatgac | gataaagaaa | aaagtataaa | atccacagca | 4860 |
| gaagctaaa | cagaaaaacaa | taagatagac | aaagatgtcg | cagaaactgc | caagaatatc | 4920 |
| agtgaatatc | ctcttaagaa | caaaaaagaa | aagagtgggg | aatttgtaga | tgaatatggt | 4980 |
| aatcccattg | atgacaaaaa | gaaagcagaa | aaacaagatg | aaacaagccc | tgtcaaacag | 5040 |
| gccttttatag | gcaagagtga | tcccacattt | gttttagcgc | aatacacccc | cattgaaatc | 5100 |
| actctgactt | ctaaagtga | tgccactctc | acaggtatag | tgagtggggt | tgtagccaaa | 5160 |
| gatgtatgga | acatgaacgg | catctatgatc | ttattagaca | aaggcactaa | ggtgtatggg | 5220 |
| aattatcaaa | gcgtgaaagg | tgccacaccc | attatgacac | gcttaatgat | agcttttact | 5280 |
| aaagccatta | cgctgatgg | tgtgataata | cctctagcaa | acgctcaagc | agcaggcatg | 5340 |
| ttgggtgaag | caggggtaga | tggctatgtg | aataatcact | ttatgaagcg | cataggcttt | 5400 |
| gctgtgatag | caagcgtgg | taatagcttc | tgcgaactg | cgctatcat | agctctagat | 5460 |
| aaactcatag | gccttggcaa | aggtagaagt | gaaaggacac | ctgaatttaa | ttacgctttg | 5520 |
| ggtcaagcta | tcaatggtag | catgcaaagt | tcagctcaga | tgtctaatac | aattctaggg | 5580 |
| caactgatga | atatccccc | aagtttttac | aaaaacgagg | gcgatagtat | taagattctc | 5640 |
| acaatggacg | atattgattt | tagcgggtgtg | tatgatgtta | aaattactaa | caaatctgtg | 5700 |
| gtagatgaaa | ttatcaaaaca | aagcaccaaa | actttgtcta | gagaacatga | agaaatcacc | 5760 |
| acaagcccca | aagggtggcaa | t | | | | 5781 |

Seq ID 49

| | | | | | | |
|-------------|------------|-------------|------------|------------|------------|-----|
| gtgaaatgtt | ttttaagcat | attttctttc | ttgacttttt | gtggtttgtc | tctgaatggc | 60 |
| acagaagtag | taataacgct | tgaaccgcgc | ttaaaagcca | ttcaggcgga | cgcacagcc | 120 |
| aaacaaaaaa | ccgctcaagc | tgaaattaaa | gccatagaag | ctcagcttag | tgccaaagaa | 180 |
| aaagccattc | aagcgcaaat | agaggagaa | ttgaggactc | agcttgcaac | catgagtgtc | 240 |
| atgttaaaag | gggctaattg | cggtattaat | gggtcctaag | gcagacaggg | ggggtttttt | 300 |
| gcaggttcag | acatcttgc | tggcgctcatg | gaaggggtat | caagcgcgct | tagtgcatgt | 360 |
| gggggggaatg | ttaaaatgat | cgtggaaaaa | caaaaaatta | acacccaaac | agaaatccaa | 420 |
| aacatgcaaa | tcgcgctcca | aaaaaataac | gaaataatca | agctcaaaat | gaaccagcaa | 480 |
| aacgctctct | tagaagcggt | aaaaaatagc | tttgaaccga | gcgttactct | aaaaacacaa | 540 |
| atggaaatgc | tttctcaagc | tctaggaagt | tcttctgaca | acgctcaata | catcgcttac | 600 |
| aatacgattg | gtatcaaggc | gtttgaagaa | accttaaaag | gttttgaaac | atgggtgaaa | 660 |

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|------|
| gtggctatgc | aaaaagcgac | ccttattgat | tataattccc | taacgggtca | ggctttgttt | 720 |
| caaagtgcc | tctatgcgc | tgctcttagt | tttttttcaa | gcatgggtgc | accatttgga | 780 |
| atcattgaaa | cattcactct | agcgcccaca | aatgccccct | atcttgatgg | gctaaaaatt | 840 |
| tcagcatgcc | ttatgggaaca | ggttattcag | aattacagaa | tgattgtagc | ccttattcaa | 900 |
| aataaaactga | gtgatgcaga | ttttcaaaat | atcgcttatt | tgaatgggat | caatggagaa | 960 |
| atcaaaacct | taaaaggatc | agtagatttg | aacgcgctca | tagaagttgc | tatcttaaac | 1020 |
| gcagaaaatc | atttaaacta | tatagagaat | cttgaaaaaa | aagccgacct | ttgggaagaa | 1080 |
| caactgaaat | tagaaagaga | aacgacagca | agaaacattg | ctagctctaa | agttattgtc | 1140 |
| aaa | | | | | | 1143 |

Seq ID 50

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|------------|------|
| atggcaggta | cacaagctat | atatgaatca | tcttctgcag | gattcttata | ggaaatttcc | 60 |
| tcaatcatct | caagcacaag | tggtgttgca | gggccatttg | caggaatagt | agcgggtgct | 120 |
| atgtcagcag | cgattattcc | tattgttggtg | ggatttacta | atccgcaaat | gaccgctatc | 180 |
| atgacccaat | acaatcagag | catcgctgaa | gccgtaagca | tgccatgaa | agctgctaac | 240 |
| caacaataca | accaattgta | tcaaggtttt | aacgatcaaa | gcatggctgt | ggggaacaat | 300 |
| atcttaata | tcagcaaatt | aacaggggaa | tttaacgtgc | aaggcaacac | gcaaggcgcg | 360 |
| caaatttagtg | ccgttaatat | tcagattgca | agcatttttag | cgagtaacac | cacccttaaa | 420 |
| aatcctagcg | ctattgaagc | ttatgcgaca | aatcaaatcg | ctgttcctag | tgtgccaaca | 480 |
| acggttgaaa | tgatgagcgg | tatcttaggc | aatattacaa | gcgcggcacc | aaaatacgcc | 540 |
| ctagctctac | aagagcaatt | gcgttctcaa | gcaagcaaca | gctcaatgaa | tgatacagcc | 600 |
| gattcccttg | atagctgtac | cgcttttaggt | gcacttggtg | gctcatcaaa | agtgtttttt | 660 |
| agttgcacgc | aaattttctat | gacgcccacg | agtgtttcta | tgcccactgt | ttatgcaaaa | 720 |
| taccaagcgt | tascnactaa | tgccctaact | tcaggcacta | atcctatgac | cactcctgca | 780 |
| tgccctattg | gggacaaagt | tcttgccgtt | tattgctatg | ctgaaaaagt | agcagaaatt | 840 |
| ttgagggaa | actatataga | atttgtgaaa | aacaatacca | atttgttgca | aaacgcttct | 900 |
| caaatgatac | ttaatcaatc | aggattagct | actagcacct | atgacactca | agcgatttct | 960 |
| aacataagct | cgctatataa | ttacaatata | gtagcgaata | aatctttttt | gaaatcgcat | 1020 |
| ttgacttacc | ttgattacat | caaaaacaag | cttaaggggc | aaaaagatag | ctacttaaca | 1080 |
| gaaagggtgc | aaactaaaat | aatcgtgaag | | | | 1110 |
| "n" can be | any base | | | | | |

Seq ID 51

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|-----|
| atgaaaacga | attttttataa | aattaaatta | ctatttgctt | ggtgtcttat | cattggcatg | 60 |
| tttaacgctc | cgcttaaatgc | tgaccaaacc | acggatataa | aagatattag | tcctgaagat | 120 |
| atggcactaa | atagcgtggg | gcttgtttct | agagatcaac | taaaaataga | gatccctaaa | 180 |
| gaaaccctag | aacaaaaagt | ggccgtactc | aatgactata | atgataagaa | tgtaaatatc | 240 |
| aagtttgaca | acataagttt | agggagtttt | caacctaatt | ataatctagg | tatcaatgcg | 300 |
| atgtggggca | ttcaaaatct | tctcatgagc | caaatgatgg | gcgattacgg | tccaaacaat | 360 |
| ccttttcatgt | atggttatgc | accaacatac | tcagattcat | catttttacc | accgatctta | 420 |
| gggtat | | | | | | 426 |

Seq ID 52

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| gtggtttgtg | caagcaaaaca | agctgacgaa | caaaaaaagc | tagtcataga | gcaagagggt | 60 |
| caaaagcgcc | aattttaaaaa | aatagaagaa | cttaaaagcag | acatgcaaaa | gggtgtcaat | 120 |
| cccttttttta | aagtcttggt | tgatgggggg | aatagggtgt | ttgggtttccc | tgaaactttc | 180 |
| atztatctct | ctatatattat | attgtttgta | acaattgtac | tatctgttat | tctttttcaa | 240 |
| gcctatgaac | tggttttgat | tgtagcgatt | cttattgtgc | ttgtagctct | tggattcaag | 300 |
| aaagattata | cgcttttatca | agaaatggag | gcagcgatga | aattttaaaaa | accttttttg | 360 |
| tttaagggcg | tgaaaaacaa | agcgttcatg | agcatttttt | ccatgaagcc | tagtaaaagaa | 420 |
| atggctaata | acatccactt | aaatccaacc | agagaagaca | ggcttgtgag | cgctgcaaac | 480 |
| tcctatctag | cgaataacta | tgaatgtttt | ttagatgatg | gggtgatcct | tactaacaac | 540 |
| tattctcttt | taggcacaa | caaattgggg | ggcattgatt | ttttaaccac | ttccaaaaaa | 600 |
| gatctcatag | agttacacgc | ttctattttat | agcgttttta | ggaattttgt | tacccttgaa | 660 |
| ttcaaattct | attttccacac | tgtaaaaaag | aaaatcggtta | ttgatgaaac | caatagggac | 720 |
| tatagtctta | ttttttctaa | tgatttcatg | cgagcctata | atgagaagca | aaagagagaa | 780 |
| agttttttatg | atattagttt | ttatctcacc | atagagcaag | atattattaga | cactctcaat | 840 |
| gaaccggtta | tgaataaaaa | gcatttttgca | gacaataatt | ttgaagagtt | tcaaaggatt | 900 |
| taagtgccca | agcttgaaaa | cttaagggat | aggatagagc | tcatagaaga | gctattgagt | 960 |
| aaataccacc | ccattagatt | aaaagaatac | actaacagtg | gcgttattta | ctccaaacaa | 1020 |
| tgcgagtttt | ataatttctc | tgtgggaatg | aatgaagccc | cttttatttg | caacagaaaa | 1080 |
| gacttgatc | tcaaggaaaa | aatgcatggg | gggggtgaaag | aagttttatt | tgccaataag | 1140 |
| catggaaaaa | tcttaaatga | cgatttgagt | gaaaaatatt | ttagcgctat | tgagattagt | 1200 |
| gaatacgccc | ctaaatcaca | aagcgatttg | tttgataaaa | tcaacgccct | agacagcgaa | 1260 |
| tttatttttca | tgcatgctta | ttcgccctaaa | aactcacagg | ttttaaaagg | caaactagct | 1320 |
| ttcacctcta | gaagaattat | tattagtggg | ggctctaaag | agcagggcat | gacttttaggt | 1380 |
| tgcttgagcg | aattagtggt | taatgggtgat | attacgctag | gcagttatgg | taattcttta | 1440 |
| gtgttggttg | ctgatagctt | tgaaaaaatg | aaacaaagcg | ttaagggaatg | cgtctctagt | 1500 |

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|-------------|------|
| cttaacgcta | aagggtttttt | agccaacgca | gcgactttct | ctatggaaaa | ttactttttc | 1560 |
| gccaaacatt | gctcttttat | cacgcttcct | tttatttttg | atgtaacttc | taataatttt | 1620 |
| gctgatttca | tcgctatgag | ggctatgagt | tttgatggca | atcaggagaa | taacgcttgg | 1680 |
| ggcaatagt | tgatgacgct | aaaaagcgag | atcaattcgc | ctttttatct | gaacttcac | 1740 |
| atgcctactg | attttggttc | agcttcagca | ggacacactt | tgatacttgg | ctcaaccggt | 1800 |
| tcaggtaaga | cagtgtttat | gtcaatgacc | ttgaacgcta | tggggcaatt | tgttcacaat | 1860 |
| tttcctgcta | atgtcagcaa | agacaagcaa | aagctcacta | tgggtttatat | ggataaagat | 1920 |
| tatggcgctt | atgggaatat | tgtcgcaatg | ggtggggagt | atgtcaagat | tgagctaggg | 1980 |
| acagatacag | gattaaatcc | ttttgcttgg | gcggcttgtg | tgcaaaaaac | aaatgcaaca | 2040 |
| atggagcaaa | aacaaaacagc | tatttctgtt | gtcaaaagagc | ttgtgaaaaa | cttagcaacc | 2100 |
| aaaagcgatg | aaaaagatga | gaatggcaac | agcatctctt | ttagcctagc | agattctaatt | 2160 |
| acgcttgtag | cggcagtaac | caaccttatc | acaggagata | tgaacctaga | ttatcccatc | 2220 |
| actcaactta | ttaatgcttt | cgggaaagac | cacaatgatc | ctaattgggt | tgtcgcgcga | 2280 |
| ttagcacctt | tttgcaaatc | aaccaatggt | gaatttcaat | ggctttttga | taataaagca | 2340 |
| acggatcgct | tagatttttc | aaaaacgatt | atggcggttg | atgggtcaag | tttcttagac | 2400 |
| aataatgatg | tttcgcccct | tatttggttt | taccttttcg | ctcgtatcca | agaggcaatg | 2460 |
| gatgggcgta | gatttgcctt | agatattgat | gaagcttggg | aatatttagg | cgatccaaag | 2520 |
| gtcgcttatt | ttgtaagaga | catgctaaaa | actgcaagga | aaagaaacgc | tattgtcaga | 2580 |
| cttgcgactc | aaagcatcac | tgatcttttg | gcttgcccta | ttgctgatac | gattagagaa | 2640 |
| caatgcccta | caaagatttt | tttgagaaac | gatgggggca | atctttctga | ttaccaaaaga | 2700 |
| ttggctaattg | ttacagaaaa | agaatttgaa | atcatcacta | agggactaga | taggaaaatt | 2760 |
| ctctacaaac | aggatggaag | ccctagcggt | atcgctagtt | ttaatttgag | gggcattcct | 2820 |
| aaagaatatt | tgaaaatttt | atccacagat | actgtatttg | tcaaagaaat | tgacaagatt | 2880 |
| atccaaaacc | atagtatcat | agataaatat | caggccttga | ggcaaatgta | tcaacaaata | 2940 |
| aaggagtat | | | | | | 2949 |

Seq ID 53

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
| ttgatcaata | ataatagtaa | taaaaaactg | agaggctttt | ttgtgaaagt | tctcttaagt | 60 |
| ctcgttggtt | tcagttcgta | tgggttagca | aatgacgata | aagaagccaa | aaaagaagtg | 120 |
| ctagaaaaag | aaaaaaacac | tcccaatggg | cttggtttata | cgaatttaga | ttttgatagt | 180 |
| ttcaaggcga | ctatcaaaaa | tttgaaagac | aagaaagtaa | ctttcaaaga | agtcaatccc | 240 |
| gatattatca | aagatgaagt | ttttgacttc | gtgattgtca | atagagtcct | taaaaaaata | 300 |
| aaggatttga | agcattacga | tccagttatt | gaaaaaatct | ttgatgaaaa | gggtaagaaa | 360 |
| atgggattga | atgtggaatt | gcagatcaat | cttgaagtga | aagacttttt | tacttttaaa | 420 |
| agcatcagca | cgaccaacaa | acaacgctgc | ttctatcggt | tgcgcgggga | aacaagagaa | 480 |
| attttatgcg | atgataagct | gtataatgtt | ttattggccg | tattcaattc | ttatgaccct | 540 |
| aatgatcttt | tgaacatcat | tagcaccgta | gagtctctca | aaaaaatctt | ttatgacgatt | 600 |
| acatgtgaag | cggtatatct | a | | | | 621 |

Seq ID 54

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|------------|------|
| atgactaacg | aaactattga | tcaaacaaga | acaccagatc | aaacacaaag | ccaaacagct | 60 |
| tttgatccgc | aacaatttat | caataatctt | caagtggctt | ttattaaagt | tgataatggt | 120 |
| gtcgcttcat | ttgatcctga | tcaaaaacca | atcgttgata | agaacgatag | ggataacagg | 180 |
| caagcttttg | atggaatctc | gcaattaaag | gaagaatact | ccaataaagc | gatcaaaaat | 240 |
| cctaccaaaa | agaatcagta | tttttcagac | tttatcgata | agagcaatga | tttaatcaac | 300 |
| aaagacaatc | tcattgatgt | agaatcttcc | acaaagagct | ttcagaaatt | tggggatcag | 360 |
| cgttaccaaa | ttttcacaaag | ttgggtgtcc | catcaaaaag | atccgtctaa | aatcaacacc | 420 |
| cgatcgatcc | gaaatttttat | ggaaaatatc | atcacaaccc | ctatccctga | tgataaagaa | 480 |
| aaagcagagt | ttttgaaatc | tgccaaacaa | tcttttgtag | gaatcattat | agggatacaa | 540 |
| atccgaacgg | atcaaaaagt | catgggcgtg | tttgatgaat | ccttgaaaga | aaggcaagaa | 600 |
| gcagaaaaaa | atggagggcc | tactgggtgg | gattgggttg | atatttttct | ctcatttata | 660 |
| tttaacaaaa | aacaatcttc | cgatgtcaaa | gaagcaatca | atcaagaacc | agttcccat | 720 |
| gtccaaccag | atatagccac | tactaccacc | gacatacaag | gcttaccgcc | tgaagctagg | 780 |
| gatttacttg | atgaaagggg | taatttttct | aaattcactc | ttggcgatat | ggaaatgtta | 840 |
| gatgttgagg | gagtcgctga | cattgatcct | aattacaagt | tcaatcaatt | attgattcac | 900 |
| aataacgctc | tgtcttctgt | gttaatgggg | agtcataatg | gcatagaacc | tgaaaaagtt | 960 |
| tcattattgt | atgcgggcaa | tggtgggttt | ggagacaaac | acgattggaa | cgccaccggt | 1020 |
| ggttataaag | accaacaagg | taacaatgtg | gctacactca | ttaatgtgca | tatgaaaaac | 1080 |
| ggcagtggct | tagtcatagc | agggtgtgag | aaagggatta | ataaccctag | ttttatctc | 1140 |
| tacaaagaag | accaatcac | aggctcacaa | cgagcattga | gtcaagaaga | gatccgaaac | 1200 |
| aaagtagatt | tcattggaatt | tcttgcacaa | aataatacta | aattagacaa | cttgagcgag | 1260 |
| aaagagaaa | aaaaattcca | aatgagatt | gaagattttc | aaaaagactc | taaggcttat | 1320 |
| ttagacgccc | tagggaatga | tcgtattgct | tttggtttcta | aaaaagacac | aaaacattca | 1380 |
| gctttaatta | ctgagtttaa | taatggggat | ttgagctaca | ctctcaaaga | ttatgggaaa | 1440 |
| aaagcagata | aagctttaga | tagggagaaa | aatgttactc | ttcaaggtag | cctaaaacat | 1500 |
| gatggcgtag | tgtttgttga | ttattctaatt | ttcaaataca | ccaacgcctc | caagaatccc | 1560 |
| aataaggggtg | taggcgctac | gaatggcggt | tcccatttag | aagcaggctt | taacaaggta | 1620 |
| gctgtcttta | atttgcctga | tttaataaat | ctcgctatca | ctagtttctg | aaggcggaat | 1680 |

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|------------|------|
| ttagagaata | aactaaccgc | ttaaaggattg | tccctacaag | aagctaataa | gctcatcaaa | 1740 |
| gacttttttga | gcagcaacaa | agaattgggt | ggaaaagctt | taaacttcaa | taaagctgta | 1800 |
| gctgaagcta | aaagcacagc | caactatgac | gaggtgaaaa | aagctcagaa | agatcttgaa | 1860 |
| aaatcccttaa | ggaaacgaga | gcatttggag | aaagaagtag | agaaaaaat | ggagagcaaa | 1920 |
| agcggcaaca | aaaataaaaat | ggaagcaaaa | gctcaagcta | acagccaaaa | agatgagatt | 1980 |
| tttgcggttga | tcaataaaga | ggctaataag | gatgcaagag | caatcgctta | cactcaaaat | 2040 |
| cttaaaggca | tcaaaaggga | attgtctgat | aaacttgaaa | aaatcagcaa | ggatttgaaa | 2100 |
| gacttttagta | aatcttttga | tgaattcaaa | aatggcaaaa | ataaggattt | cagcaaggca | 2160 |
| gaagaaaacgc | taaaagccct | taaaggctcg | gtgaaagatt | taggtatcaa | tccagaattg | 2220 |
| atttcaaaag | ttgaaaacct | taatgcagct | ttgaatgaat | tcaaaaatgg | caaaaataag | 2280 |
| gatttcagca | aggtaacgca | agcaaaaagc | gaccttgaaa | attccgttaa | agatgtgatc | 2340 |
| atcaatcaaa | aggtaacgga | taaagttgac | aatctcaatc | aagcggatc | agtggctaaa | 2400 |
| gcaatgggcg | atttcagtag | ggtagagcaa | gtgtagccg | atctcaaaaa | cttctcaaa | 2460 |
| gagcaatttg | ctcaacaagc | tcaaaaaaat | gaagatttca | atactggaaa | aaattctgaa | 2520 |
| ctataccaat | cgtttaagaa | tagtgtaaat | aaaaccctag | tccgtaattg | gttatctgga | 2580 |
| atagaggcca | cagctctcgc | caaaaatttt | tccgatatca | agaaagaatt | gaatgagaaa | 2640 |
| tttaaaaaatt | tcaataacaa | taataatgga | ctcaaaaaca | gcacagaacc | catttatgct | 2700 |
| aaagttaata | aaaagaaaac | aggacaagta | gctagccctg | aagaacccat | ttatactcaa | 2760 |
| gttgctaaaa | aggtaaatgc | aaaaattgac | cgactcaatc | aaatagcaag | tggtttgggt | 2820 |
| gggtgtagggc | aagcagcggg | cttccctttg | aaaaggcatg | ataaagttga | tgatctcagt | 2880 |
| aaaggtagggc | tttcagctag | ccctgaaccc | atctacgcta | cgattgatga | tctcggcgga | 2940 |
| cccttccctt | tgaaaaggca | tgataaagtt | gatgatctca | gtaaggtagg | gcgatcaagg | 3000 |
| aatcaagaat | tggctcagaa | aattgacaat | ctcaatcaag | cggtatcaga | agctaaagca | 3060 |
| ggttttttt | gcaacctaga | gcaaacgata | gacaagctca | aagattctac | aaaaaagaat | 3120 |
| gttatgaatc | tatatgttga | aagtgccctg | aaagtgcctg | ctagtttgtc | agcgaatttg | 3180 |
| gacaattatg | ctattaacag | ccacacacgc | attaatagca | atatccaaaa | tggagcaatc | 3240 |
| aatgaaaaag | cgaccggtat | gctaacgcaa | aaaaaccctg | agtggcttaa | gctcgtgaat | 3300 |
| gataagatag | ttgcgcataa | tgtgggaagc | gtttctttgt | cagagtatga | taaaattggc | 3360 |
| ttcaaccaga | agaatatgaa | agattattct | gatttcgttca | agttttccac | caagttgaac | 3420 |
| aatgtctgtaa | aagacattaa | gtctggcttt | acgcactttt | tagccaatgc | attttctaca | 3480 |
| ggatattact | gcttggcgag | ggaaaatgcg | gagcatggaa | tcaaaaatgt | taatacaaaa | 3540 |
| ggtggtttcc | aaaaatct | | | | | 3558 |

Seq ID 55

| | | | | | | |
|------------|------------|------------|-------------|------------|------------|------|
| gtggcaataa | acaccttttt | aaaacattct | tttttagtct | gtttgttagc | ggttaattct | 60 |
| tacgcttttg | attggaacat | ttttaaatat | aatctgggtt | tcaatatgtt | catcatggac | 120 |
| catgaaggct | caacgcctta | ttgggtcaat | actaacacca | atcttaaaac | ccgtttgact | 180 |
| ccaaattttg | ggatccaatt | ttatacaaga | ggtgtggagc | aaagcttgac | tgtggggcg | 240 |
| tatttttttc | aaaacttcca | taactacagc | actaattttc | cctaccgttg | ggggcctact | 300 |
| atgtattata | aggctagagg | gaagcgtttt | actttttatg | gagggatttt | ccctaggaaa | 360 |
| aacctcttag | gaaggtagtg | tttgaatatt | tttgccctt | attattgggt | tatagatcca | 420 |
| aacgctagag | ggttttttat | gcaatttcaa | aaccattatt | cgcttcaaaa | accctattat | 480 |
| gggcatgagg | agttcatgct | agattgggtt | ggaggcaatt | gttacaacac | ttgtaagttt | 540 |
| gggagaaacc | cttatgggaa | cgcaatggac | aggttttcaa | tgaacggctc | tgtcgcttat | 600 |
| aatctcttta | aggattttat | gggtatttga | gggtattttg | tcttgttcca | taacgaagac | 660 |
| aaataccttt | taaatggggc | tgatggcatg | cagtttaatg | aaaaaaaagc | gattgataac | 720 |
| agtgcgattt | atttactgga | tgccttttat | tataatgctt | acattagcac | aagcctttta | 780 |
| gacatcgccc | cctttatgga | aaaactcagc | gctaaatttg | gcatggtttc | tgaagcgagc | 840 |
| cgatttgaaa | acagagagaa | agaagtgcct | tttatcaata | gcgtgggagg | gcaatttgat | 900 |
| gtggagatcc | aatacaaaag | ctttggcacc | cacaatttat | ttttcttcgc | caagacccca | 960 |
| gagatgcctt | tttataacca | ataccagtat | gttgaaatgt | attgcacgcc | ttcgtattgc | 1020 |
| cccacgccta | tttatcgtgg | cgtgccattc | tttcaagcga | acatgtataa | ccgttttgat | 1080 |
| ttctattaca | actggaaaaa | cgacttcgca | tccgtccgca | tcaatttcgt | gcttaatgcg | 1140 |
| atgcgtgggg | gctttgatag | gagcttgctc | tggtcagaat | cttaccagat | gtatatgacg | 1200 |
| gttgcttttg | atccttataa | ccttattaac | aaaatttgcca | gaaaaaag | | 1248 |

Seq ID 56

| | | | | | | |
|------------|-------------|-------------|------------|-------------|-------------|-----|
| atgatgattt | tcattgatgc | atgtttttaga | aaggaaacgc | cttacacgcc | catttggtatg | 60 |
| atgaggcaag | cggggaggtta | ccttagcgaa | taccaagaga | gccgtaaaaa | agcggggag | 120 |
| ttcttggaa | tgtgtaaaaa | tagcgatcta | gccacagaag | ttaccttaca | gccggtagag | 180 |
| attttagggc | tggatgcggc | tattttgttt | agcgatattt | tagtagtgcc | tttggaatg | 240 |
| ggcttgaatt | tggagtttat | ccccaaaaag | gggcgcgatt | tttttagagac | gattacggat | 300 |
| ttaaaaagcg | tggaaagcct | aaaagtaggg | gcttataaac | aactaaacta | tgtctatgat | 360 |
| acgatttctc | aaacgcgcga | aaagctttct | agagagaaag | cgttaatcgg | tttttgcgga | 420 |
| tgcctttgga | ctttagcgac | ttacatgata | gaaggcgagg | ggagcaaatc | gtatgccaaa | 480 |
| agcaagaaaa | tgcctttatag | cgagcctgaa | gtttttaaag | cgctttttaga | aaaattaagc | 540 |
| cttgaattga | tagagtattt | gagccttcaa | atccaagcag | gggtcaatgc | agtgatgatc | 600 |
| tttgactcat | gggctagcgc | tttagaaaaa | gaagcgtatt | tgaatttcag | ttgggattat | 660 |

| | | | | | | |
|------------|------------|-------------|-------------|-------------|-------------|------|
| ttgaaaaaaa | tctctaaaga | gcttaaaaaa | cgctatgcgc | atatcccagt | tatccttttc | 720 |
| cctaaggga | ttggcgctta | tttgatagc | atagatggg | aatttgatgt | gtttggcggtg | 780 |
| gattggggca | cgcccttaac | tgccggcaaaa | aagatttttag | gcggtaagta | tgttttgcaa | 840 |
| gggaatttag | aaccaccg | cctttatgat | aaaaacgctt | tagaagaagg | ggttgaaacg | 900 |
| attctaaaag | tcatgggcaa | tcaagggcat | atttttaatt | tagggcatgg | gatgttgccg | 960 |
| gatttaccga | gagaaaacgc | caaataattta | gtgcaattag | tgcattgctaa | aaccagacga | 1020 |

Seq ID 57

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|------|
| atgtataaaa | cagcgattaa | tcgtcctatt | acgaccttaa | tgtttgcttt | ggcgattgtc | 60 |
| ttttttggga | ctatggggtt | taaaaaattg | agcgtggcgc | ttttccctaa | aattgatttg | 120 |
| cctacggttg | tggttactac | gaactatcct | ggggctagcg | ctgaaatcat | agagagtaag | 180 |
| gtaaccgata | agattgaaga | agcgggtgatg | gggattgatg | ggatcaaaaa | ggttacttcc | 240 |
| acgagttcta | aaaatgtgag | tatcgctgctc | attgaatttg | agttagaaaa | acctaataaa | 300 |
| gaagccttaa | acgatgtggt | gaataaaaatt | tcttcgggtgc | gttttgatga | ctctaacatt | 360 |
| aaaaaacctt | ctatcaataa | atttgatatac | gacagccaag | ccattatttc | attgtttgtg | 420 |
| agcagttcaa | gcgtgccggc | tacaaccctt | aatgactacg | ctaaaaacac | catcaaaccc | 480 |
| atgctccaaa | aaatcaatgg | ggtagggggc | gtgcagctca | acggcttttag | ggagcgccag | 540 |
| attaggattt | atgcaaatcc | cactttgatg | aataaatata | acctgactta | tgcggtatctt | 600 |
| ttcagcacgc | ttaaagcgga | gaatgtggaa | attgatgggg | ggcgatttgt | caatagccaa | 660 |
| agggaaattt | ctattttaat | caatgcgaat | agttatagcg | ttgcggatgt | ggaaaagatt | 720 |
| caagtgggta | atcatgtgcg | tcttgccgat | attgcaaaaa | ttgaaatcgg | tttggaagaa | 780 |
| gacaacactt | ttgcgagctt | taaagacaaa | cccgtgtgta | ttttagaaat | ccaaaagatt | 840 |
| gccggagcga | atgaaattga | aatcgtagat | aggggtgatg | aagctttaaa | gcgcatcaca | 900 |
| gccattagcc | ctaactatga | aatcagaccc | tttttagaca | ccacgggcta | tatccgcacc | 960 |
| tctattgaag | acgtgaaatt | tgatctagtt | tttagggcga | tttttagcgg | tttagtgggtg | 1020 |
| tttgcttctt | tgcgtaacgg | cacgatcacc | ctcgtttcag | cgatctctat | ccctatttct | 1080 |
| atcatgggga | cttttgcgct | catccaatgg | atgggctttt | cattaaacat | gctcaccatg | 1140 |
| gtggctttta | cggtggcgat | agggattatc | attgatgatg | cgatcgtggg | gattgaaaac | 1200 |
| atccataaaa | agctagaaat | gggcatgagt | aaacgaaaag | cgagctatga | gggggtgaga | 1260 |
| gaaattggct | ttgctctagt | ggcgatttca | cgatgctgc | tctctgtttt | tggtgctata | 1320 |
| gggaacatga | aaggcattat | tgggcgtttt | tttcaaagtt | ttgggatcac | ggtggcttta | 1380 |
| gogatcgctc | tatcgtagtg | ggtggtcggt | acgattatcc | ccatggtaag | ctcagtcgtg | 1440 |
| gtcaatccca | ggcattctcg | tttttatgtg | tggagtggag | ctttttttta | ggcttttagag | 1500 |
| tctcgtttta | ccaagtgtgt | ccaatgggta | ttaaacacaa | agatcattat | ctctatagcg | 1560 |
| gtggtttttg | tggtttgtgg | atcgcttttt | tggtcttcta | agattgggtat | ggagtctcatg | 1620 |
| ctgaaagaag | atagggggag | gtttttgtgtg | tggcttaagg | ctaaaccggg | cgtgagcata | 1680 |
| gattacatga | cacaaaagag | taagatcttt | caaaaagcga | ttgaaaaaca | tgctgaagtg | 1740 |
| gaattcacca | ccttgcaagt | gggttatggc | accacacaaa | acccttttaa | ggctaagatt | 1800 |
| tttgtgcaac | tcaagccttt | aaaagagcgt | aaaaaagagc | atcaattggg | gcaattttgag | 1860 |
| ttgatgagcg | ttttaaggaa | agagttgaga | agcttgccgtg | aagctaaagg | tttagatact | 1920 |
| attaatcttt | ctgaagttac | tcttataggg | ggcgggtggg | atagtctcgc | cttccaaacc | 1980 |
| tttgtgtttt | cccattctca | agaagcgttg | gataaaagcg | tggagaattt | gaaaaaattc | 2040 |
| ttattagaaa | gccctgaatt | aaaaggcaag | gttgaaagct | atcatacaag | cacgagcgaa | 2100 |
| tcgcaaccgc | aattgcaact | caaaatctta | agacaaaacg | ctaacaataa | cggcgtagag | 2160 |
| gctcaaacca | ttggatcagt | ggtgagctct | gctttttctg | ggacttctca | agcgagcggtg | 2220 |
| ttcaaagaag | atggcaagaa | atcgcacatg | atcatttagag | tgcttgatga | caagcgcggtt | 2280 |
| tctgtagaag | acatcaaacg | cttgcaagtg | cgtaacaaat | acgataaatt | gatgttttta | 2340 |
| gacgcttttag | tggaaatcac | agaaactaaa | agcccgctcca | gtatttctcg | ctataaccgc | 2400 |
| caacgcagcg | ttacgggtgt | tgctgagcct | aataggaatg | cgggcggttc | tttaggcgag | 2460 |
| attttaacgc | aagttagcaa | aaacactaaa | gaatgggtgg | ttgaaggggg | gaattacaga | 2520 |
| tttaccggag | aagcgggata | cgccaaagag | agcaacgggg | agtttttagt | cgcttttagcg | 2580 |
| acagcggttg | tgctgattta | tatgatttta | gcggcgttgt | atgagtcocat | tttagagcct | 2640 |
| tttatcatca | tggttaccat | gcctttaagt | ttttcagggg | cgttttttgc | tctaggttta | 2700 |
| gtccatcagc | cttttagcat | gttctctatg | ataggtctga | ttttgctcat | tggtatgggtg | 2760 |
| ggtaaaaaacg | ccacgccttt | aatgatgtg | ctggaatgaag | agcgtaaaaa | aggtttgaat | 2820 |
| atccaagagg | ccattttatt | tgccggcaaa | acccgtctaa | gaccgatttt | aatgacgacc | 2880 |
| attgcatggt | tttgccggat | gctgccttta | gctgtggcga | gtgggggatgg | agcggcgatg | 2940 |
| aaatccccta | tagggattgc | gatgagtggtg | ggcttgatga | tttctatggg | gttaagctta | 3000 |
| ctcattgtgc | cggtgtttta | tcgtttgtctc | gctcccatag | acgacaaaat | caagcgggtt | 3060 |
| tatcaaaacc | aaaaaacttt | agaa | | | | 3084 |

Seq ID 58

| | | | | | | |
|------------|-------------|------------|-------------|-------------|------------|-----|
| atgaaaaaag | tactcatcat | taacgggggc | aaagcgttcg | ggagctctgg | agggaaactc | 60 |
| aatgaaacct | tgactgacca | tgcaaaaaag | actctagagt | ctttgggggt | agaagtggat | 120 |
| actacgatcg | tgtataaagg | ctatgaacat | gctcaagaag | tgagagaaagt | ctttagcgct | 180 |
| gatgcgacga | tttgccaaat | gcctgggtgg | tggtatgggag | agccttggtat | tgtagaaaaa | 240 |
| tacattgatg | aagtcttttag | cgtagggcat | ggaagcgttt | atgctagcga | tggcagaagc | 300 |
| tcgcaaaacc | ccactaaaaa | ctacgggaaa | gggggcttga | tgcaaggcaa | aaaatacatg | 360 |

| | | | | | | |
|------------|-------------|-------------|------------|-------------|------------|-----|
| ttgagcttga | cttggaaacgc | tcccattgaa | gcctttaatg | atcctagtga | atTTTTtgaa | 420 |
| ggggtgggtg | tggatgttgt | gtattttgcat | ttgcataaag | cgttccaatt | tttagggctt | 480 |
| tcagcggttg | ccacttttat | ttgcaacgat | gtgggtgaaa | accccccaagt | ggagcagtat | 540 |
| cttaactctc | tcaccacgca | tttgcgccaa | gcttttggca | ag | | 582 |

Seq ID 59

| | | | | | | |
|-------------|-------------|------------|-------------|------------|-------------|------|
| ttgggtttttg | tttttctttt | taaatgcgtt | aatgaagaaa | caagcctgaa | ttttacgccc | 60 |
| cttttagagc | gaatggcatg | caatttgcaa | gcgcgttttt | atagcgttta | taaggataat | 120 |
| accacttctt | tctacctcca | agcgagcgct | gaaaccactt | tagagtccgc | gcaaaaactc | 180 |
| agcgaaattc | tgcccttttc | tttagatttt | agctttttgt | ctttaaagga | aatcacagag | 240 |
| cccttagatg | aaaatctttt | ccaaacagca | agcctttcaa | agccctttt | tatgaacgct | 300 |
| aaagagcatc | aagatttttt | agacaaaaat | tcactctttg | atgccgatac | tctgggcttg | 360 |
| attaaaaaca | ccgcttttaa | gggggatata | atccatagcc | ctaaagagct | tatagattgc | 420 |
| ttaacccaat | taaaaggcat | gctcaaaacg | caagatttta | tcctattttt | cacttctaga | 480 |
| gaggcggttat | ccctttcttt | aaaaaatccc | tctccaagcg | ttatttttag | cgatctttct | 540 |
| agcgttttga | gctgcactaa | attgccttta | gaggacgcta | aatatttggc | cagtttggaa | 600 |
| aaaccctcca | tcaaagcccc | attaaaaagc | gtgtttaaag | acactttcaa | aaacgatgaa | 660 |
| atcatcgccc | agctacccta | tgaccccata | ttgaatttat | tgtgccatat | tttacaagat | 720 |
| gaggggatag | aatttgtttt | tatgcatgaa | agccgttctt | gtgaagcgct | tttgtattat | 780 |
| gaagcgcttt | ttaaaacccc | taaacgcttg | atcacacca | ctaaaaaatt | cggtctagaa | 840 |
| aataattttt | ctacctttcc | ctttaaagat | gaattagagt | ttttaagcgc | aacccccaat | 900 |
| tctatcgttt | tgtatctcag | tttcaagcgc | cctacaaggt | tgttattgca | tgctaagtgt | 960 |
| tctttaaaaa | cgcttttaag | cgtcagtttt | gatttttaaca | aaatgtttta | cgcgctcaaa | 1020 |
| caagatgaaa | aagcctccag | aatgctacaa | aactacgcca | ctaaattccc | tgattttttac | 1080 |
| gcgcgcattg | tagagctttc | taaatacgat | ctaggggcg | cgaatttatt | ggattttttt | 1140 |
| tgcattttag | ggtttgtttt | gggctatagc | gaggattttt | gcacacagag | cgttattcct | 1200 |
| ttggctaaag | aatgcttacg | ccctaaaggc | cctaggattg | attataaaat | ccttaaagac | 1260 |
| aattctttga | aaatggcttt | aaacttttca | aagatcatgc | acagtgcgat | gagtttcagg | 1320 |
| ctcgagggcg | tggaaaatga | aatttttagt | ttggggattt | tggattcttt | agcggagttt | 1380 |
| ttagggaatt | tcatttggga | taacgcgcaa | aattttagcg | ttcaagaagt | aacgatcgct | 1440 |
| ggggattttc | ttggcgaaaa | agtgtttttg | gatttgtttg | tgcggtattt | ccctaaaacc | 1500 |
| ctagccctta | aaacgcgatgc | atttttggat | tatgaa | | | 1536 |

Seq ID 60

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| attaaaaaat | taattctatc | ctctcttgtt | ttcgcatgta | tcaataccag | cgttgaagct | 60 |
| ttagaaaaatg | acggctctaa | accaaacgat | ttgacttctc | caaaagaagc | ctctcaagaa | 120 |
| tctcaaaaaa | atgaagctcc | aaaaaatgaa | gttcaaagaa | atgaagctca | aaaagaacc | 180 |
| ccccaatcca | atcaaacgcc | taaagaaatg | aaagtcaagt | ccatttctta | tgtcgggctt | 240 |
| tcttacatgt | ctgacatgct | cgctaataga | attgtaaaga | ttcgtgtggg | cgataattgtg | 300 |
| gattctaaaa | aaatagacac | cgctgttttg | gctttgttca | atcaagggtta | ttttaaagac | 360 |
| gtttatgcca | cttttgaagg | cgcatatta | gagtttctat | ttgatgaaaa | agccaggatt | 420 |
| gccggggtag | aaatcaaggg | ttatgggact | gaaaaggaaa | aagacggctt | aaaatcccaa | 480 |
| atggggatca | aaaaggcgga | cacctttgat | gagcaaaaaat | tagagcatgc | taaaacggct | 540 |
| ttaaaaaaccg | cttttagagg | gcagggctat | tatgggagcg | tggtggagggt | gcgcacagaa | 600 |
| aaggtcagtg | aggggtcatt | attgatcggt | tttgatgtga | atagggggga | tagcatttat | 660 |
| atcaacaat | ccatttatga | gggaagcgcg | aaattaaaaac | gccgcagatg | tgaatctttg | 720 |
| agtgcgaaca | agcaacgaga | tttcatgggc | tggatgtggg | gcttgaatga | cgggaaattg | 780 |
| cgtttagatc | aactagaata | cgattctatg | cgtatccaag | atgtgtatat | gcgtaggggt | 840 |
| tacttagacg | ctcatatttc | ttcgcccttt | ttgaaaacgg | atttttctac | ccatgacgct | 900 |
| aagcttcatt | ataaagtcac | agaggggatc | caatacagga | tttcagacat | tttaatatag | 960 |
| attgacaacc | cggtagtccc | cttaaaaaacc | ttagaaaaag | cgcttaaaagt | gaaaaggaaa | 1020 |
| gatgtcttta | atattgagca | tttaagagcg | gatgcgcaaa | ttttaaaaac | cgaaatcgcc | 1080 |
| gataagggtt | atgcgtttgc | ggtgggtgaag | ccagacttgg | ataaagatga | aaaaaacggg | 1140 |
| cttgtgaaag | tccatttatcg | tattgaagtg | ggcgatatgg | tgtatatcaa | tgatgtcatc | 1200 |
| atttcaggga | accagcgac | gagcgatagg | atcatttagaa | gggagttatt | gttagggcct | 1260 |
| aaggataaat | acaacttgac | caaactgaga | aattccgaaa | attctttaag | gcgttttagga | 1320 |
| ttcttctcta | aagtcaaaat | tgaagaaaaa | agggtaata | gctcactcat | ggatttatta | 1380 |
| gtgagcgtag | aagagggcg | tactgggcag | ttgcaatttg | ggttaggcta | tggctcttat | 1440 |
| ggagggctta | tgottaatgg | gagcgtgagc | gaaagaaacc | tttttggcac | agggcaaacg | 1500 |
| atgagcttgt | atgtcaacat | cgctacaggg | gggggtagat | cttatccggg | catgccaaaa | 1560 |
| ggagcggggc | gtatgtttgc | cggaattttg | agcttgacta | atccaaggat | ttttgacagc | 1620 |
| tggtatagct | ctacgatcaa | cctttatgcg | gattacagga | taagctacca | atacatccaa | 1680 |
| caaggcgggg | gctttggggg | gaatgtcggg | cgcatgctgg | gtaatagaac | ccatgtgagc | 1740 |
| ttagggtata | acttgaatgt | taccaaactc | cctgggttca | gcagcccttt | atacaaccgc | 1800 |
| tactattcct | ctgttaatga | agtgtttctc | ccaaggcaat | gttctacccc | cgcatcggtg | 1860 |
| attatcaatc | gcttatcagg | cggtaaaaacc | cccttacaac | ctgaaagctg | ttctagtcct | 1920 |
| ggagcgatca | ccacttcacc | agaaataaga | ggtatttggg | atagggatta | ccatacgctt | 1980 |
| atcaccagct | ctttcaccct | tgatgtgagc | tatgacaaca | ccgatgatta | ttacttcctt | 2040 |

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|------|
| agaaatgggg | ttatcttttag | ttcctatgcg | acgatgtctg | gcttgccaag | ctctggcacg | 2100 |
| ctcaattctt | ggaacgggtt | aggcgggaat | gtccgtaaca | ccaaagttaa | tggtaaattc | 2160 |
| gccgcttacc | accatttgca | aaaatatatta | ttgatagatt | tgatcgctcg | ctttaaaacg | 2220 |
| caaggaggtt | atatcttttag | gtataacacc | gatgattact | tgcccttaaa | ctccaccttc | 2280 |
| tacatggggg | gcgtaaccac | ggtgagaggc | tttaggaacg | gatcggttac | tcctaaagat | 2340 |
| gagtttggtt | tgtggcttgg | aggcgatggg | atttttaccg | cttctactga | attgagctat | 2400 |
| ggggtgctaa | aggcggctaa | aatgcgctta | gcgtgggttt | ttgactttgg | tttcttaacc | 2460 |
| tttaaaaccc | caactagagg | gagttttttc | tataacgctc | ctgttacgac | agcgaatttt | 2520 |
| aaagattatg | gcgttatagg | ggctgggttt | gaaagagcga | cttggagggc | ttccacaggc | 2580 |
| ttgcagattg | aatggatttc | gcccatgggg | cctttgggtg | tgattttccc | tatagcgttt | 2640 |
| ttcaaccaat | ggggcgatgg | caatggcaag | aaatgtaaag | ggctatgctt | caaccctaac | 2700 |
| atggacgatt | acacgcaaca | ctttgaattt | tctatgggaa | caaggttt | | 2748 |

Seq ID 61

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|------|
| atgaggaaaa | ttttttctta | tgttttgaag | gctttgttgt | ttattgggat | tgtttatgca | 60 |
| gagccggaat | ctaaagtgga | agccttagaa | gggaggaagc | aagagtcttc | tttggataaa | 120 |
| aaaatccgcc | aagaattgaa | gaataaggat | ttgaaaaata | aagaattgaa | aaataaaaaa | 180 |
| gaagaaaaga | aaaacaccga | agaaaagaaa | gaaacaaaag | ccaagagaaa | gcccagggca | 240 |
| gaagtccatc | atggggatag | caaaaatccc | actcaaaaaa | taacgcctcc | taaaatcaaa | 300 |
| gagaacgcta | aaggagttca | aaatcaaggc | gttcaaaagc | acgcgcctcc | acttgaagaa | 360 |
| aaagacacaa | cctctcaaac | tcttgaaaaa | aagggagcaa | gccctagctc | tcaattcaat | 420 |
| tccatttttt | gtaatcctaa | tgacgctgct | aacaataccc | ttgaagataa | ggtcgtaggg | 480 |
| ggcattttct | tgtctgttaa | tggttcgcct | atcacgctgt | atcaaatcca | agaagagcaa | 540 |
| gaaaaataaa | aagttagcaa | agctcaagca | agggatcggt | tgatcgctga | acgcattaaa | 600 |
| aaccaagaaa | ttgagcgctt | aaaaatccat | gtagatgacg | acaagctaga | ccaagaaatg | 660 |
| gcgatgatgg | cgcaacaaca | aggcatggat | ttggatcatt | tcaaacaaat | gcttatggct | 720 |
| gagggacatt | ataaactcta | tagggatcag | cttaaggagc | atttggaat | gcaagaattg | 780 |
| ttgcgtaata | tcttactcac | gaatgtggat | accagctctg | aaactaaaat | gcgcgaatat | 840 |
| tacaacaaac | acaaggagca | attcagtatc | cccactgaaa | tagaaaccgt | gcgctacact | 900 |
| tccaccaatc | aagaggattt | agaaaaggcg | atggcggatc | ctaatttgga | aattccaggg | 960 |
| gtgagtaagg | ctaataaaaa | aatagagatg | aaaaccttaa | accctcaaat | cgctcaagtc | 1020 |
| tttattttcgc | atgagcaagg | ctcttttacg | cccgttatga | atgggggtgg | ggggcagttc | 1080 |
| atcacctttt | atatcaagga | aaaaaagggt | aaaaacgaag | tgagcttcag | tcaggccaag | 1140 |
| caattcatcg | cccaaaaatt | agtggaagaa | tctaaagata | agattttaga | agagcatttt | 1200 |
| gaaaaattgc | gcgttaagtc | taggattgtg | atgattagag | ag | | 1242 |

Seq ID 62

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|------|
| atgctttctg | tcatacact | ggccgctggt | aaaggcactc | gcagcgcttc | tagcctgcct | 60 |
| aaaactttac | acaccatttg | tggggagcct | atgttgtttt | acattttaga | aacggctttt | 120 |
| tcaatcagcg | atgatgtgca | tcttatctta | caccaccaac | aagaacgcat | taaagaagcg | 180 |
| gtgttgagag | gttttaaggg | cgctattttt | cacactcaaa | ttgtggaaaa | atattcaggg | 240 |
| acaggtgggg | ctatcatgca | aaaagataaa | acgcctattt | ctacgaaaca | tgagcgggtt | 300 |
| ttgattttga | atgcggacat | gcctttaatc | actaaagacg | ctctcgcccc | cttattagaa | 360 |
| agcaagaata | acgctatagg | cttactccat | ttagctgacc | ctaaaggtta | tgggcgcgtt | 420 |
| gttttagaaa | accatcaggt | taaaaagatt | gtagaagaaa | aggacgctaa | tgatgaagaa | 480 |
| aaagaaatta | aaagcgtgaa | tgctggcggt | tatgggtttg | aaagggattt | tttagaaaaa | 540 |
| tactttacca | agctccatga | ccaaaacgcc | caaaaagaat | actacctcac | ggatttaatc | 600 |
| gctctaggga | tcaatgaaaa | cgaacaacat | gaagctattt | tcttaaaaga | agagtgtttt | 660 |
| ttaggggtga | atagccaaac | agaaaaggcg | aaagctgaag | aaatcatgct | agaaagactg | 720 |
| cgcaaaaacg | ccatggactt | gggggtagtg | atgcaattgc | ctaatagcat | ttatttagaa | 780 |
| aaaggcgtga | gttttaaggg | ggagtgcgtt | ttagagcaag | gggtgcgttt | gattgggaat | 840 |
| tgtttgatag | aaaacgcgca | tattaaggct | tatagcgtga | tagaagagag | ccagattgtt | 900 |
| aatagcagtg | tggggccggt | tgcccatgct | cgccctaaaa | gcgtgatttg | taatagccat | 960 |
| gtgggggaatt | ttgtagagac | taaaaacgct | aaacttcaag | gcactaaagc | agggcatttg | 1020 |
| agctattttg | gggattgtga | gatagggaaa | aacacaaatg | taggggctgg | cgtgatcact | 1080 |
| tgcaattacg | atggtaaaaa | gaaacaccaa | acaatcatcg | gtgaaaatgt | ctttataggg | 1140 |
| agcgatagcc | agctagtcgc | cccataaat | atcggtctta | atgtcttaat | cggcagcggc | 1200 |
| accactatca | ctaaagacat | tcctagcggg | tcgttgagcc | tttcacgcgc | ccctcaaacc | 1260 |
| aacattgaaa | acgggtattt | taagtttttt | aagaaacct | | | 1299 |

Seq ID 63

| | | | | | | |
|------------|-------------|-------------|------------|-------------|------------|-----|
| atgaaagaaa | tcactatcgc | ccttgtgggc | cagcctaatt | tggggaaatc | gtccttaatc | 60 |
| aacgcttttg | gcaacgcca | tttgaaagt | gggaattttg | ccgggggttac | cgtggataaa | 120 |
| atggaagtgg | gtttgatcca | caaagagcat | caaatcacta | tcattgattt | acctggcact | 180 |
| tacgcgctca | atgacttcac | cactgaagaa | aaggttacta | aagatttttt | agaaaaaggg | 240 |
| caatacgate | tcattcttaa | tgtgggtggat | tcaccaat | tagagcgtaa | tttagcctta | 300 |
| agcgcgcagc | tatttagacac | gaataaaaaa | atgctactcg | cactcaacat | gtgggatgag | 360 |
| gcacaaaaag | agggcattaa | aatcaataca | gaaaagcttt | ctaaagaatt | aggggttgtg | 420 |

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|------|
| tgcggtgccaa | caagtgcgaag | atccaaagaa | gacgcgttga | ataccgagct | tttatttagac | 480 |
| gaaattgtca | ggctttattc | tcaaaatact | acaaataatg | aaaacataaa | agtcgccgtct | 540 |
| caaagcttta | aggagtcttt | aaaatacagc | cagagcgctc | aaagaatcgc | tcaatttagtg | 600 |
| atcagtga | accaacaaaa | cgcgagtttt | gaacacactt | ataagattga | taagatttta | 660 |
| atgcacaagc | gttatgggat | tttcattttt | ttagggttta | tggttatcat | tttttccttg | 720 |
| agctttttta | tagggggggg | agtgcacaaa | gcgcttgaaa | cagggtttta | atttttaagc | 780 |
| gatggcatca | aagaaaatgt | ggctaataaa | gatttagcgt | ctttgggtgg | cgatggcatt | 840 |
| attgggggag | tgggagcgac | ggtttcattc | ttgcctttta | ttgtgggtgt | gtattttggg | 900 |
| atttcctttac | tagagacgac | aggctatatg | agtagggtag | cgttttttgt | agatgggatc | 960 |
| ttgcataaaa | ttggcttaca | tgggaagagt | tttatccctt | taatcaccgg | ttttggctgc | 1020 |
| tcagtgcacg | cttacctggc | gacaagaacc | ttacaaaact | ataacgaacg | actgatcacg | 1080 |
| ctttttgtga | tcgggtttat | gagctgctcg | gcaaggctgc | ctattttatgt | gctgtttgta | 1140 |
| ggctcgtttt | tcccttcttc | aagtgcgtgg | tttgtgctgt | tttgcattta | tattttgggg | 1200 |
| gcggttggtg | cgtagtgatg | ggccaaatta | ctcaaattaa | gcgtgtttta | aggacaaacc | 1260 |
| gaatctttta | tcatggaaat | gcccacatac | cgctttccca | gttgagaaat | ggtctatttc | 1320 |
| agtatctaca | caaatcgctc | ttcttacctt | aaaaaggctg | ggacttacat | tttagtgga | 1380 |
| gcgattttta | tctggtttat | gtctcaatac | cctaaaagcg | atgcggccat | gaaagcttat | 1440 |
| aaacaagaaa | gcttggttagt | gaataaggat | accactcttt | caagcgaagc | taaagaagaa | 1500 |
| aaattaaaaag | aattaaaaac | agaattggat | aaaaagaatt | taaaaaatag | cattgtagga | 1560 |
| agagggcggg | cgtattttaga | aaaagtcttt | agccctatgg | attttgattg | gcgtttgagt | 1620 |
| gtgtcgcttg | taaccggatt | tatggctaaa | gaggtgggtg | tttctacttt | gggctgtgtg | 1680 |
| ttttcttttag | gggatcaaaa | tgaaaaatct | gacgctttta | gagggatttt | aagaaaagaa | 1740 |
| gtcagcgctg | ctagcgggaat | cgctttttatc | gtgtttgtga | tggtttatat | cccttgtttt | 1800 |
| gcagcgacca | ttacttttgg | tagggaagcg | ggagggataa | agtttgtagc | gtattttatc | 1860 |
| atcttcacaa | ccgttgtagc | gtatgcgttt | tccttgatag | ctttttatgc | gactcaaat | 1920 |
| ttggtt | | | | | | 1926 |

Seq ID 64

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|------|
| atggcaaat | tattgaaaaa | cggcaaaaact | ttaaaaacaag | ctagagatga | aatcctagcc | 60 |
| aggacagaaa | aaacagggca | ttataatggt | ctcaaaaaaac | tagagttaa | agaaagagat | 120 |
| ccgattgggt | atgagaagat | gttctctaaa | ttaaaggcg | gtatcggtca | tgccagagaa | 180 |
| acggctaaaa | ggattgcggc | aagccctatt | gttgagcaag | aggagaaat | gtgcttcacg | 240 |
| ctttataacg | ctgtgggcga | tagcgtgctg | acttctacag | gtatcattat | ccatgtaggg | 300 |
| actatgggat | cagctatcaa | atcacatgga | gagaataatt | gggaagataa | cccaggcatc | 360 |
| aatgacaagg | atattttcac | caataacgac | tgcgcgattg | ggaatgtgca | cccattcgat | 420 |
| attatgactc | ttgtgcttat | tttccacgat | gaaaaattga | ttgggtgggt | aggcggtgtt | 480 |
| acgcatgtga | ttgataccgg | ttcggttact | ccaggatcga | tgagcactgg | acagggtcaa | 540 |
| agattttggg | atggatacat | gatcacttgc | cgtaagacag | gagcgaatga | tgaagccttt | 600 |
| aaagattggt | tgcataaatc | tcaaagatcg | gttcgcacgc | ctaaatattg | gattctagat | 660 |
| gaaaggcta | ggattgcagg | atgccatag | attaggatt | tagtgatgga | agtcattaaa | 720 |
| gaagacggca | ttgattctta | catgcgattt | attgatgagg | tgattgaaga | ggggagaaga | 780 |
| ggccttatct | ctaggattaa | atccatgacc | ataccaggca | agtatagaaa | ggtagcgttt | 840 |
| gtggatgtgc | cttatgcgca | taaggatatt | ggcgtgtgct | ctgagtttgc | taagctagac | 900 |
| acgatcatgc | actctcctgt | ggaaatcact | atcaataaag | acgctacatg | gaaattggat | 960 |
| tttgtagggc | cgtctagggt | gggatggcac | tctttcaatt | gcaaccaagt | gtcttttact | 1020 |
| agcgttattt | gggtgatgat | gactcaaacg | ctgatacca | cttctcgcat | caacgatggc | 1080 |
| gcttattttg | cgactcaatt | cagactcaaa | aaagggactt | ggatgaatcc | agatgacagg | 1140 |
| cgccacgggc | atgcttatgc | gtggcacttc | ttggtatcag | gctggagcgc | tttggggaga | 1200 |
| ggcttgtctc | aagcgtatta | cagccgaggg | tatttagaag | aggccaattc | cgggaacgct | 1260 |
| aacacttcca | attggctgca | aggtggcggt | atcaaccaag | atggagaaat | ccatgcgggtg | 1320 |
| aatagotttg | agacgagttc | ttgtgggact | ggagcttggt | cgataaaaga | cggcttaaat | 1380 |
| cacgcagcgg | ctatttggaa | cccagagggc | gatattggcg | atggtgaaat | ttgggaaatg | 1440 |
| gcagagcctc | ttctttattt | aggcaggaat | gtcaaagcca | ataccggtgg | gtatgggaaa | 1500 |
| tatcgaggcg | gtaacgggtt | tgaacacctta | agaattggtg | ggggtgcgca | tgattggacc | 1560 |
| atgttcttta | tgggtaattg | ctatatgaat | agcgattggg | gtatgatggg | aggctatcca | 1620 |
| gcggcttagtg | gttatagggt | tgaagcgcac | aacaccgatt | tgaaaaacag | gattaaaaat | 1680 |
| aacgccagct | tgcctttggg | gggcgatttt | aacccaactg | atcgcgatta | tgaaaagcac | 1740 |
| atttctcatg | cgtctcaagt | caaaagggat | aagcaatgca | tcaccaactga | aaactgcttt | 1800 |
| gacaattacg | acttgtattt | gaattacatc | aaaggcggtc | ctggatttgg | cgatccgatt | 1860 |
| gaaagggatt | tgaatgcgat | tttagaagat | ctcaacagca | aacagctatt | gccagaatac | 1920 |
| gcttacaagg | tttatggcgc | agtgttgagt | caaaataaag | acggcgtgtg | ggtcgcgcat | 1980 |
| gaagccaaaa | cgaaagccag | aagaaaagaa | attcttgaaa | acagaaaggc | tagatccata | 2040 |
| ccggtaaaaac | aatggatgga | gcaagaaaga | aacgctatcc | ttgaaaaaga | ggcttccaaa | 2100 |
| caggtttaagc | acatgtatgc | gactagcttt | gatctctcgc | ctaagttttt | gaatgatatt | 2160 |
| aaaacattct | ggaacttgcc | aaagaatttg | agcgtgaaag | aagatgagct | tggcgtattc | 2220 |
| acctatggat | ctaaatacag | gatggatttg | agcaaatgct | ctgatgtgcg | cacagtctcg | 2280 |
| ttggttgatg | agaaa | | | | | 2295 |

Seq ID 65

| | | | | | | |
|-------------|-------------|------------|------------|------------|-------------|------|
| atgcaagata | attcagtc | tgaaacaaa | aatattgtag | aagtggggat | tgattcttct | 60 |
| attgaagaga | gctattttagc | ttattccatg | agcgtgatca | tagggcgcg | tttaccggac | 120 |
| gctagagatg | gcttaaagcc | cgtgcatagg | cgtattttgt | atgcgatgca | tgaattaggc | 180 |
| cttactttcaa | aagtcgctta | caaaaaaagc | gctaggatcg | tgggtgatgt | gattggtaaa | 240 |
| taccaccccc | atggcgataa | tgcggtttat | gatgcgctag | tgagaatggc | gcaagatttt | 300 |
| tccatgcggt | tggaaattagt | ggatgggcag | ggcaactttg | gctctattga | tggcgataac | 360 |
| gccgcagcga | tgcgttacac | tgaagccaga | atgactaagg | cgagtgaaga | aattttaagg | 420 |
| gatattgata | aagacacccat | tgattttgtg | cctaattatg | acgatacctt | aaaagagcca | 480 |
| gatattttac | caagccgctc | gcctaaccct | ttagtcaatg | gggctaattg | gatcgctgtg | 540 |
| gggatggcga | cttctatccc | ccctcacagg | atggatgaaa | tcatagacgc | tttagtgcat | 600 |
| gtcttagaaa | accctaacgc | tggattagat | gaaatcttag | aatttgtcaa | agggcctgat | 660 |
| tttcccactg | gtgggatcat | ttatggcaag | gcgggtatta | ttgaagccta | taaaacgggg | 720 |
| cgaggacgcg | tgaagtgcg | ggccaaagtg | catgtggaaa | aaacaaaaaa | taaagaaatc | 780 |
| atcggttttag | atgaaatgcc | ttttcaaacc | aataaagcca | aattagtggg | acaaatcagc | 840 |
| gatttagcgc | gagaaaagca | aattgaaggc | attagtgaag | tgcgcgatga | gagcgataga | 900 |
| gagggcatta | gagtggtgat | tgaattaaaa | agagacgcga | tgagtgaat | tgtcttaaac | 960 |
| cacctctaca | aactcaccac | tatggaaacc | acttttagca | tcattttact | cgctattttac | 1020 |
| aataaagagc | ctaagatttt | cacgctttta | gagttgttgc | accttttctt | aaaccacaga | 1080 |
| aaaaccatta | ttataagacg | cacgattttt | gaattagaaa | aggctaaggc | cagagcgcat | 1140 |
| atttttagagg | gctattttgat | cgcactagac | aatattgatg | aaatcggtcg | actcattaaa | 1200 |
| acaagccaaa | gcccgagaagc | ggctaaaaac | gccttaattg | agcgtttcac | tttgagcgag | 1260 |
| attcaaagca | aggccatttt | agaaatgcgt | ttgcaacgct | taacaggcct | tgaaggggat | 1320 |
| aagatcaaag | aagaataacca | aaacttggtg | gagcttattg | atgatctcaa | tggcatttta | 1380 |
| aagagcgaag | atcgcttgaa | tggagtcgct | aaaacagagc | ttttagaagt | caaagagcaa | 1440 |
| ttttcttctc | caaggcgcac | tgaaattcaa | gaatcttatg | aaaatattga | catagaagat | 1500 |
| ttgatcgcta | atgagcctat | ggtagtgage | atgagttata | aaggctatgt | gaaaagagtg | 1560 |
| gatttaaaag | cttatgaaaa | gcaaaatcgt | ggtggtaaag | gcaagctttc | aggcagcact | 1620 |
| tatgaagacg | atttcattga | aaactttttt | gtggctaaca | cgcattgata | tttgctcttt | 1680 |
| atcaccaata | aggggcaatt | gtatcatttg | aaagtctata | aaatcccaga | agcgagccgg | 1740 |
| atcgctattg | tgaagcccat | tgtaaattta | atctcgctcg | ctccggatga | aaagatcatg | 1800 |
| gcgactctaa | gcaccaaaaga | ctttagcgat | gaacgctctt | tggccttctt | cacgaaaaat | 1860 |
| ggcgtgggtga | agcgacccaa | tttgagcgaa | tttgaaagca | acaggagttg | tggatatcaga | 1920 |
| gcgattgttt | tagatgaagg | cgatgaatta | gtgagcgcaa | aagttgtgga | taaaaacgct | 1980 |
| aagcatttgc | tcacgcgcat | gcatttgggc | attttcatta | aattcccttt | agaagaggtg | 2040 |
| cgcgagatcg | gaagaactac | tcgtggggtt | attggcatca | agctgaatga | aaacgatttt | 2100 |
| gttgtcggtg | cggtcggtat | tagcgatgat | ggcaacaagc | ttttgagcgt | gagtgaatac | 2160 |
| gggcttgcca | agcaaacctt | agccgaagcg | tatagagggc | aatctcgtgg | aggtaagggg | 2220 |
| gtcattggca | tgaagctcac | tcaaaaaacc | ggcaatctag | tgggcgttat | cagcgtggat | 2280 |
| gatgaaaaat | tggatttgat | gatccttact | gcaagcgcaa | aaatgatcag | agtttctatt | 2340 |
| aaagatatta | gagaaacggg | aagaaacgct | agtggggtaa | agctcataaa | caccgcggat | 2400 |
| aaagtcatgt | atgtcaattc | ttgccctaaa | gaagaagagc | cagaaaattt | agaaacctct | 2460 |
| tcggcacaaa | atttgtttga | g | | | | 2481 |

Seq ID 66

| | | | | | | |
|-------------|------------|-------------|------------|------------|-------------|-----|
| atggaattta | tgaaaaagtt | tgtagcttta | gggcttctat | ccgcagtttt | aagctcttcg | 60 |
| ttgttagccg | aaggtgatgg | tgtttatata | gggactaatt | atcagcttgg | acaagcccgt | 120 |
| ttgaatagta | atatttataa | tacaggggat | tgcacaggga | gtgtttagag | ttgcccccca | 180 |
| ggtcttaccg | ctaataagca | taatccagga | ggcaccaata | tcaattggca | tgctaaatac | 240 |
| gctaattggg | ctttgaatgg | ctttggggtg | aatgtgggtt | ataagaagtt | cttcagttc | 300 |
| aagtcctttg | atatgacaag | caagtgggtt | ggttttagag | tgtatgggct | ttttgattat | 360 |
| gggcattgcca | ctttaggcaa | gcaagtttat | gcacctaata | aaatccagtt | ggatatggtc | 420 |
| tcttgggggtg | tggggagcga | tttggttagct | gatattattg | ataacgataa | cgcttctttt | 480 |
| ggtatttttg | gtggggtcgc | tatcgggcgt | aacacttgga | aaagctcagc | ggcaaacctat | 540 |
| tggaaagagc | aaatcattga | agctaagggt | cctgatgttt | gtacccctac | ttattgtaac | 600 |
| cctaaccgctc | cttatagcac | caaaacttca | accgtcgctt | ttcaggtagt | gttgaatttt | 660 |
| ggggtgagag | ccaatattta | caagcataat | ggcgtagagt | ttggcgtgag | agtgccgcta | 720 |
| ctcatcaaca | agtttttgag | tgcgggtcct | aacgctacta | atctttatta | ccatttgaaa | 780 |
| cgggattatt | cgctttattt | aggggtataac | tacactttt | | | 819 |

Seq ID 67

| | | | | | | |
|-------------|-------------|------------|------------|-------------|------------|-----|
| atggcgatct | tacgcgcaaa | ccttagccct | aaaaacaaat | taaacgccac | tttaaaaggg | 60 |
| tggctcccca | ttttacaaaag | cgagcttgaa | gatttagaag | aagtgttgaa | acaaaacgct | 120 |
| ttagataaacc | ccttaatcaa | aattgaaaac | aaacgcatac | aaaatttttag | cgatcgcttt | 180 |
| agcgctaaaa | agagtagcga | tcattctgaa | aatttgcgaa | ccgcatctaa | aagccttttt | 240 |
| gaaaccttag | aagtcctaaat | catccccct | ctctttccta | ctgaaacctc | tcaaaaaatc | 300 |
| gctatggata | ttatcagcgg | gttgaataat | gaggggtatt | ttgaagaaaa | tattgaagaa | 360 |
| agggctagaa | ttttaggggt | agagagcgaa | gtttatgaaa | aagtgcgcaa | gcgttttagt | 420 |

| | | | | | | |
|-------------|-------------|------------|------------|------------|-------------|------|
| taccttaatc | ccgctggcat | tggtgctaaa | gatgtgaaag | agagcttttt | attccagtta | 480 |
| gagagtaggg | aattagacga | taatgagctt | tatgaagaaa | cgcgaaaaat | cattttaaat | 540 |
| ttagaaaaac | accatgaatt | ttctaaagat | ttttattatg | aaaaggcttt | aaagatttta | 600 |
| aaatccttta | aaaaccccc | agccattgag | tttttagaaa | aagaaataga | agtcattcct | 660 |
| gaacttttta | ttgtagaagt | ggataatgga | atcatcgctg | gtttgaatga | tgagagctac | 720 |
| ccgacaatca | gtttggaaga | aaatcgcttt | aaggatagcg | gctattttaa | agaaaaatta | 780 |
| aaagaggcta | aagatttgat | tgatgcgcta | aatttgagaa | aagccacgat | ttataaaatc | 840 |
| ggctctgatgc | tttttagagta | tcaatacgat | ttttttaagg | gtaaggaatt | acgcccttta | 900 |
| aagctattag | attttagccaa | tgagtttaac | cactctgtaa | gcacgatctt | aaggggccatt | 960 |
| tctaataaat | atttggcatg | cgaagggggg | gttttcccca | ttaagcattt | cttttagcatc | 1020 |
| gccttagaca | atagcgagac | ttcaaacgct | gtgattaaag | actatctttt | agaattgatc | 1080 |
| aaaaacgaag | acaaaaaaga | gcctttgagc | gacgctaaga | ttttagaact | cattgaagaa | 1140 |
| aaattccatt | tgaaaatggt | aagaagaacg | atcaccaaat | accgccaact | gctcaacatc | 1200 |
| gcctcttcaa | gcgaaaggaa | aaggctctat | ttgatgcgcg | ct | | 1242 |

Seq ID 68

| | | | | | | |
|-------------|------------|-------------|------------|-------------|-------------|------|
| atgcaagttt | tagcgttaaa | ataccgcccc | aaacatttta | gcgagctagt | cggccaagag | 60 |
| agcgtggcta | aaacgctttc | tttagcccta | gacaaccagc | gtttggctaa | cgcttattta | 120 |
| ttcagcgggt | taagaggctc | agggaaaacc | agctcttcta | ggatttttgc | tagggcttta | 180 |
| atgtgtgaag | aagggccaaa | ggctgtgctt | tgcgatactt | gcataccaatg | ccagagcgct | 240 |
| ttaaacaacc | accacataga | tattatagaa | atggatgggg | cgtctaatag | ggggattgat | 300 |
| gatgtccgta | atctcataga | gcaaacgcgc | tacaaaccaa | gctttgggcg | ctataaaatc | 360 |
| tttatcattg | atgaagtgc | tatgttcacc | accgaagcgt | ttaacgcgct | tttaaagact | 420 |
| ttagaagagc | ctcctagcca | tgtgaaattc | cttttagcga | caacagacgc | cttgaaactg | 480 |
| cccgtacc | tactcagccg | caccagcat | ttcaggttta | aaaaaatccc | tgaaaattcc | 540 |
| gttattttctc | attttaaaac | catttttagaa | aaagaacaag | tgagttatga | aacaagcgcg | 600 |
| ttagaaaaac | tggctcacag | cgggcaaggg | agcctaaggg | atagcatcac | tcttttagaa | 660 |
| caagccatca | attattgcga | taacgcctatc | acagaaagca | aggtggctga | aatgttagga | 720 |
| gcgattgaca | gaagcgtttt | agaagatttt | ttccaaagcc | taatcaacca | agatgaagcg | 780 |
| cgattaaaag | agcgttatgc | catttttagaa | aattatgaaa | ccgagagcgt | tttagaagaa | 840 |
| atgatgccttt | ttttgaaagc | gaaattattg | agccctgatt | tttattctat | ccttttgata | 900 |
| gagcgctttt | ttaaaatcat | tatgagcagt | ttgagccttt | taaaagaagg | ggcaaatgcc | 960 |
| agttttgtgc | tgttgttatt | gaaaatgaaa | ttcaaagaag | ctttgaaatt | caaagcccta | 1020 |
| gacgatgcga | ttttggaatt | agagcaaacc | cctttcaatc | aaaaccctag | cataagctat | 1080 |
| aacgccccta | aacaagaatc | taaaaatata | gaaaaaagag | aaaaaataga | acaaatagaa | 1140 |
| agaatagagg | gaacagaaaa | aagagaaaaa | ctagaaaaaa | aagagaacgc | agaaaccccg | 1200 |
| caaactccca | tgctttcagc | taaagatcgc | atttttcaca | accttttcaa | acaagttcaa | 1260 |
| acattgggtt | atgagcgcaa | ttatgagtta | ggggcggtgt | ttgaaaaaaa | tatccgtttc | 1320 |
| attgattttt | acagccagac | taaaaccttg | acttgggagt | ctttagccac | tgataaggat | 1380 |
| aaggagcttt | taagagaacg | atttaaaatc | gtgaaaagta | tcgttgatgg | ggtttttggc | 1440 |
| aaggcgaaa | gtatcaaaat | cgctttaaaa | aatcattcag | aaaataaaaag | cacttttagaa | 1500 |
| gtggttaaag | agcttaaat | cccttattca | aagcccaaac | caaccactga | aacgacggct | 1560 |
| gaaacgaaag | aaaaagaaac | taaagaaaaa | gagattcaag | aaaacgacac | taaagagatt | 1620 |
| caagaagtc | aaccaaaca | agcccctaca | gcgttgcaag | aattcatggc | taaccactct | 1680 |
| gagctgattg | aagagattaa | gagcgagttt | gaaatcaaaa | gcgtggaatt | gtta | 1734 |

Seq ID 69

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| atgagaatat | ttttgaaatt | gttgattcct | ttattttggt | tgaaggggca | ggttatggct | 60 |
| caaaatttac | ccaccattgc | tttactggcg | acagggggga | cgattgcagg | gagtggcg | 120 |
| agcgcgagtt | tgggtagtta | taagagtgg | gagttgggca | tcaaagagct | tttgaaggct | 180 |
| atccctagtc | ttaacagact | cgctcgcat | caaggggagc | agatttctaa | catcggtca | 240 |
| caagacatga | atgaagaggt | atggttcaag | ctcgccaaac | gtgcccaaga | attgctagat | 300 |
| gatagccgta | ttcaaggcgt | ggatcatcac | catggcacgg | acactttaga | agagagcgcg | 360 |
| tatttttttaa | acttagtttt | acgctccaca | aaaccggctg | tgctgggtgg | agcgatgcgt | 420 |
| aatgctgctt | ctttgagcgc | ggatggggct | ttgaatttat | ataatgctgt | gagcgtagcg | 480 |
| ctcaatgaaa | aaagtgcgaa | taaaggcggt | ttagtgggtga | tggaagataa | tatttttagc | 540 |
| gctagagaag | tgattaaaac | gcacaccacc | cacacttcca | cctttaaagc | cttaaatagc | 600 |
| ggcgcgatag | ggagcggtga | ttatggcaaa | acgcgctatt | acatgcagcc | tttgagaaaa | 660 |
| cacaccacag | agagcgaatt | ttccctttca | caactcaaaa | ccccctgcc | taaagtggat | 720 |
| attatttaca | cgcattgctg | catgacctcc | gatttattcc | aagcgagcct | aaactcgcat | 780 |
| gcaaaaggcg | ttgtgatagc | cgggggtgggt | aatgggaatg | tgagcgctgg | gttttttaaaa | 840 |
| gcgatgcaag | aagcgagcca | aatgggggtg | gttattgttc | gttctagcag | ggtaaatagc | 900 |
| ggtgagatta | cttcaggcga | gattgatgac | aaggccttca | tcacaagcga | caatttaaac | 960 |
| ccccaaaaag | ctagggtgct | tttacaactc | gctttaacta | aaacaaataa | taaagaaaaa | 1020 |
| atccaagaaa | tgtttgaaaga | gtat | | | | 1044 |

Seq ID 70

| | | | | | | |
|------------|------------|------------|------------|------------|------------|----|
| atggacttta | aaaataaaaa | atggcttttt | ctagccccct | tagcaggcta | tacggatttg | 60 |
|------------|------------|------------|------------|------------|------------|----|

| | | | | | | |
|-------------|-------------|------------|------------|------------|-------------|-----|
| cctttcagga | gcgtggtgaa | aaaatttggc | gtggatgta | ccacgagcga | aatggtgagc | 120 |
| tcgcattcgt | tgggtgatgc | gtttgataaa | acttctaaaa | tgttggaaaa | atccccctta | 180 |
| gaagatcatt | tcatggcgca | aatttcaggg | tctaaagaaa | gcgtagtcaa | agaagcgggtg | 240 |
| gagaaaaatca | acgcttttaga | gcatgtgaat | gggattgatt | ttaattgcgg | ttgtcccgt | 300 |
| cctaaagtgg | ctaatcatgg | taatggtagt | gggttattga | aggattttaa | ccacttagtg | 360 |
| aagcttttaa | aaaccatcag | agaaaaact | agtaaaaaaa | tcacaagcgt | gaaagtgcgt | 420 |
| ttaggctttg | aaaagaaaat | ccctaaagaa | atcgctcatg | ccctaaatga | cgcaccgggtg | 480 |
| gattatgtgg | tgggtgcatg | gaggacacga | agcgataaat | acaaaaaaga | caaaatagat | 540 |
| tacgaaagca | tcgctttaat | gaaaaagatt | ttaaaaaagc | cggtgatagc | caatggcgaa | 600 |
| attgacagcg | tgaaaaaggc | ttttgaagtt | ttacaaatca | ctcaagcgga | tgggctaattg | 660 |
| atagggcgag | cggccttaag | agccccatgg | atattttggc | aaatcagaaa | caacaccaca | 720 |
| aaattacccg | cagtctgtaa | aaaagacctg | gttttagaac | attttgataa | aatggtggag | 780 |
| ttttatgggg | atatgggggt | aatcatgttt | aggaaaaatt | tgcattgcta | cgttaagggc | 840 |
| gaaatgcaag | cgagcgcgtt | tcgtaactgc | gtcaataccc | ttacagaaat | aaagagcatg | 900 |
| cgagagagca | tagaggaatt | ttttaatcaa | gaaatgttgc | aaagtgaagt | gccgttatgg | 960 |
| gtagaattga | atcaaaaaag | cgtt | | | | 984 |

Seq ID 71

| | | | | | | |
|-------------|------------|------------|------------|-------------|-------------|------|
| atggcaatag | gttcattaag | ctcattaggg | cttggcagta | aggttttgaa | ttacgatgtg | 60 |
| attgacaagc | ttaaggacgc | tgatgaaaag | gcgttaatcg | cccccttaga | caagaaaatg | 120 |
| gagcaaaatg | ttgaaaaaca | aaaagccctt | gtagaaatta | aaacgctcct | ttcagctcta | 180 |
| aaaggcccgg | ttaaaacgct | ttcagattat | tccacttata | tcagccgaaa | aagcaatgtt | 240 |
| acaggcgatg | cgttgatgac | gagcgtgggg | gttggcgtgc | ctattcaaga | tattaaagtg | 300 |
| gatgtgcaaa | atttagcgca | aggcgatatt | aacgaattgg | gggcgaaatt | ttcttcaaga | 360 |
| gcgcatattt | ttagccaaat | ggataccacg | ctcaagtttt | acacacaaaa | caaagactac | 420 |
| gccgttaata | ttaaagcagg | aatgacttta | ggcgatgtgg | ctcaaagcat | cacggacgct | 480 |
| accaatggcg | aagtgatggg | tattgtgatg | aaaacaggag | ggaatgacct | ctaccaatta | 540 |
| atggtgaata | ccaaaaacac | cggcgaaagc | aaccgagctc | attttggctc | acacctccaa | 600 |
| tccacgctca | ctaacaaaaa | cggcctttct | ttgggggttg | atgggagcgg | aaaaagttaa | 660 |
| gtgagtttga | atttaaaggg | ggctgatggg | aacatgcatg | aagtcccat | catgctagaa | 720 |
| ctccctgaaa | gcgcttctat | caaacaaaaa | aacaccgcaa | tccaaaaagc | gatggagcag | 780 |
| gctttagaaa | atgaccctaa | ttttaaaaaa | ttgatcgcta | atggggatat | ttccatagac | 840 |
| actcttcatg | gaggggaatc | tttaatcatt | aatgacaggc | gtgggggaaa | cattgaagtt | 900 |
| aaagggagta | aggctaaga | gcttgggttt | ttacaaacca | ccaccaaga | aagcgattta | 960 |
| ttaaaaagct | ctcgacgat | aaaagagggt | aaattagaag | gggtggtcag | tttgaattgg | 1020 |
| caaaaactgg | atttgatgac | tttaaccaaa | gagagcaaca | ccagtgaaga | aaacacagac | 1080 |
| gctatcattc | aagcgatcaa | cgctaaggaa | ggcttgatg | cgttcaaaaa | cggcgaaagg | 1140 |
| aagcttgtga | tcaattctaa | aaccggaatg | ctaacgatta | agggcgagga | cgttttaggc | 1200 |
| aaggccagtt | tgaagatttt | gggttttaaa | gctggcatgg | tgcaatctta | tgaagcttca | 1260 |
| caaaaacacg | tttttatgtc | taaaaatttg | caaaaagcga | gcgattcagc | attcacttat | 1320 |
| aatgggggtga | gcacacacg | ccccactaat | gaggtcaatg | atgtgattag | tgggggtta | 1380 |
| atcacttttg | agcaaacac | agagccta | aaacctgcca | ttatcagcgt | gagtaggggac | 1440 |
| aatcaagcca | ttatagacag | ccttactgaa | tttgtcaaa | cctataatga | gcttatccct | 1500 |
| aaactggatg | aagacactcg | ttatgacgct | gacactaaaa | tcgctgggat | ttttaacggc | 1560 |
| gtgggcgata | ttcgcgcat | tcgatcttct | cttaataatg | tgttttctta | tagcgtgcat | 1620 |
| acggataatg | gggtagaaag | cttgatgaaa | tacgggctta | gttttagacga | taagggcggtg | 1680 |
| atgagtttgg | atgaggctaa | attgagtagt | gcgctaaatt | ctaaccctaa | agcgactcaa | 1740 |
| gattttttct | atgggagtg | tagtaaggat | atggggggca | gagaaatcca | caaagagggc | 1800 |
| attttttcta | aattcaatca | agtcactcgt | aatctcatag | atggagggaa | cgtctaaatta | 1860 |
| aagattttatg | aagattccct | agacagagac | gtctaaaagc | tgactaaaga | caaagaaaac | 1920 |
| gctcaagagc | ttttaaaaaa | ccgctacaac | attatggcgg | acgttttgcc | gcttatgata | 1980 |
| gccaaatctc | taaagccaat | caaaaattca | attccgtgca | aa | | 2022 |

Seq ID 72

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-----|
| atgcaaatg | caacagcaat | atggaaaaca | agaatttggc | aactccaaac | ccattttgat | 60 |
| aaaaaagaag | cgcatttgaa | gcatttagaa | gcacaacaca | aagaatttgt | aagagatgaa | 120 |
| aaacgctatt | tagaaaagga | aaaaaaagag | cttgaaaaag | aacgccaat | tttagaacia | 180 |
| gaaaaagaaa | attttaaaaa | acagcgcgct | gtttgtaaag | aatctcaagc | caaagcgcta | 240 |
| gacgcgatgc | tcaattacat | ggcttatact | aaagatgaaa | ttaaaagcat | gatttttagag | 300 |
| caattagaag | agaatttaga | agcccaaaaa | agcgctttaa | tcaggcggtta | tgaaaaagaa | 360 |
| gccaaagaag | agggcaagaa | aaaatcgtat | gccatttttag | cgggaagcgac | agcccgtttt | 420 |
| gcgggttaatt | atgcggcaga | gaatttaaca | actcgtattg | ctttgccttg | ctcagattat | 480 |
| atcggtcgtg | tgataggcaa | agacgggaaa | aatattgaag | cgtttaaaaa | ggtcagcggg | 540 |
| gtggatatag | aattttagcga | agatagcagc | gaattgtggt | tgtccagttt | caatctttat | 600 |
| cggcgtagaag | tagcgagcga | gacgcttaaa | atttttaata | aagacggccg | tatccagcct | 660 |
| aacaggattg | aagaggttta | tcataagagtc | gcgcgcaacc | tggaaaaaga | attgctttct | 720 |
| gaaggggaga | gcgtggtggt | agaatttagag | cttggagcta | tggaaagatga | gcttaaaatt | 780 |
| ttaataggca | aatgcgttta | tcgctccagt | tttgggcaaa | acgccttaca | gcattctaaa | 840 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| gaagtcgctc | tttttagccg | cttgattgca | gagcagcttg | ggggggataa | aaaactcgct | 900 |
| agaagagccg | gtattttgca | tgatattggt | aaagcgctca | cccaagagct | tgggagagat | 960 |
| catgtgaatt | taggggttga | ggtgtgcaag | cgccataaag | aagatccggt | tgtgatcaat | 1020 |
| gcgatttatg | cccaccatgg | gcatgaagag | attttgagcg | tggagtgcgc | gagcgtgtgc | 1080 |
| gcggtcgatg | gcgtttcagc | agggcgctct | ggggctagga | gaaagagcga | tgaagaatac | 1140 |
| gctaaacgca | tgcaagcttt | agaagagatc | gcgctagaat | ttgatggggt | ggaaaaagcg | 1200 |
| tatgcgatgg | agagtgggcg | agaattaaga | gtgattgtca | aatccaacca | agtcagggac | 1260 |
| aatcaagtgc | ctattattgc | cagaaagatc | gctaaaaaga | tagaagagag | cgctcagtat | 1320 |
| gtgggcgaag | tgggctgca | agtgggtgca | gaaagccggt | tcaaaacgac | cgctacgctc | 1380 |
| aagcaa | | | | | | 1386 |

Seq ID 73

| | | | | | | |
|-------------|------------|------------|------------|-------------|------------|-----|
| atgcccatgc | gtttgcacac | tgcctttttt | ggtattaatt | cattgcttgt | tgcctctctt | 60 |
| ttgataagcg | gttgcagctc | ctttaaaaag | cgtaacacta | acgcccagct | aatccccctt | 120 |
| tcagctaattg | gcttgcaagc | ccccatttat | cccccaacca | atttcacccc | tagaaagagc | 180 |
| attcagcctc | tcccaagccc | tcgccttgag | aataacgatc | agcccgctcat | tagttctaac | 240 |
| cccactaacg | ctatccctaa | cacccccatt | ctcacgccta | ataatgtcat | tgaattgaac | 300 |
| gcatgggcat | gggctgggt | ccagaatcca | ccatttcacc | ctctcaagcc | ctggctc | 357 |

Seq ID 74

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|------|
| atggaaaaca | acccaaacaa | taaccaagcg | tcattagaac | gcaacgaatt | gcacaacacc | 60 |
| atttggaag | tggctaacga | attgagaggg | tcagtggatg | gctgggattt | taagcaatac | 120 |
| gttttaggca | ttctttttta | ccgctacatt | tcagaaaaca | tgactcatta | catcaataaa | 180 |
| gaagagcgaa | agcgcgatcc | gagttttgat | tacgctaaat | taagcgatga | aaaggccgag | 240 |
| cgtggaagaa | aacaccttat | tgaacaaaaa | ggctttttca | tcccgcgaag | cgctttattt | 300 |
| tgtaatgcgc | taaaaaacgc | gtgccataac | gaagatctca | atgtaacctt | acaaaatatt | 360 |
| tttaacgaaa | tagaaaaatc | tagccttggc | actccatcag | aagaaaatgt | caaaggcttg | 420 |
| tttgcggtt | tagatgtcaa | tagcaataaa | ttagggagct | ctcatcaaaa | taggggtggaa | 480 |
| aaattgacta | aaatccttga | agccataggg | ggcatgcaat | taggcgatta | tttaaaaaagc | 540 |
| gggattgatg | tttttggcga | cgcttatgaa | tatttaattg | ccatgtatgc | gagcaacgcc | 600 |
| ggcaaaagcg | gaggggaatt | tttcaccccc | caagaagtga | gcgaactgct | cgctaaaate | 660 |
| accctacacg | gccaaagagag | cgtcaataaa | gtttatgacc | catgctgtgg | gagtgaggagc | 720 |
| ttactcttac | aattttctaa | agtgttaggc | gataaaaaatg | tctcaaaagg | gtattttggg | 780 |
| caagaaatca | atttgaccac | ttacaacctt | tgccgtatca | acatgttttt | gcatgacatc | 840 |
| aattattcta | aattccatat | tgcgcacggg | gcacgccttt | tagacccaaa | acatgaagac | 900 |
| gatgagcctt | ttgatgcgat | cgtttccaac | cctccttatt | ccactaaatg | ggtgggcgat | 960 |
| agcaacccca | ttttaatcaa | cgatgagcgc | tttagcccg | ctgggtgtgct | agcgcccaaa | 1020 |
| aacgcgcgcg | atctcgcatt | cactatgcac | atgctttctt | atztatccaa | tagcggcacg | 1080 |
| gctgcgatcg | tggaaatttc | cgggggtgctt | tataggggaa | acgctgaagc | aaaaatcaga | 1140 |
| gaatatttag | tcaaagagaa | tgctattgac | tgctgtatcg | ctttaccaga | caacctcttt | 1200 |
| tttggaacga | gtatcgctac | ttgcatttta | gtgcttaaga | aaaacaaaca | agacgacacc | 1260 |
| acgcttttta | ttgatgcgag | taaggaattt | gtcaaagagg | gcaagaaaaa | caagctcaaa | 1320 |
| gagcgcaacc | gagaaaagat | tttgcaaac | tatatgaaa | gaaaagagat | taagcatttt | 1380 |
| tgcgccctag | ctaattattga | gaaaaatcaa | gaaaacgatt | acaatctctc | cgtgaatcgc | 1440 |
| tatgtggagc | aagaagacac | caaagaagcc | attgacatta | aagcgcttaa | tagtgagatt | 1500 |
| gctcaaatcg | tagaaaagca | aagcgcttta | aggaaccgtc | ttgaatccat | catcaaagag | 1560 |
| ttagaagggg | ggcaaaatgc | a | | | | 1581 |

Seq ID 75

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|------|
| atgctacaaa | ccatcaactt | aacgcaacgc | tatgcgacta | aaaaattggt | tgaaaacgtg | 60 |
| aatatcaagc | tggataaaaa | caaacgctac | gggcttattg | gggctaattg | cgcaggaaag | 120 |
| tccacttttt | taaagatttt | aagcaagagc | attgattgta | gcagtgggga | agtcattcatt | 180 |
| acaagcggca | tgaaaatggg | ggttttaggg | caggatcaat | acgcttttga | agatttgagc | 240 |
| cttaaaagatg | cggttttgat | aggcaacaag | cgttttgtatg | acgctatcaa | agaaaaagag | 300 |
| cgttatataca | ccgaaggcga | tttgagcgat | gataaagtga | atgccagatt | aggggagtta | 360 |
| gaaaccattt | gcgtggaaga | agatcccatg | tatgaatgcg | aagtggcgat | tgaaaaaatc | 420 |
| ctagaagatt | taggcattcc | tagctctaaa | cacaacgatt | tgatgaaaac | cctgccaaagc | 480 |
| agcgataaat | ttaaaatcct | tctcgctcaa | gtcttgttcc | ctaaaccgga | tattttgctt | 540 |
| ttagatgagc | cgaccaacaa | cctggattta | aacgcctatg | aatggctaga | aaacaacctc | 600 |
| aaacgcctatg | aaggcacgat | gctcgctcatt | agccatgaca | ggcatttttt | aaatgcggta | 660 |
| tgcacgcata | ttttggattt | ggatttccac | agcgtgcgcg | aatttagcgg | gaattatgac | 720 |
| gattgggtata | tcgcttccac | tctgatcgct | aaacagcaag | aggccgaacg | caataaaaaa | 780 |
| ctcaaaagaaa | aagaagagct | agaaaaatc | atcgcgcgct | ttagcgctaa | cgcttctaaa | 840 |
| gccaaagcaag | ccaccagccg | ccaaaaacaa | ctggataaat | tagacattca | aagtttagcg | 900 |
| gtatctagca | gcagggatcc | tagctattatt | tttaaaccca | aacgcacccat | tggtaatgaa | 960 |
| gccttagagt | gcgaaaacat | ctctaaaagt | tatgacgacc | aaatcgtttt | aatcaagtg | 1020 |
| agcttgaaag | tgatgcctaa | agacaagatc | gcctcatag | ggccaaacgg | cgtgggtaaa | 1080 |
| tccacgcttt | gtaaaattct | agtagaagaa | ttaaagccgg | ataagggcgt | ggtgaaatgg | 1140 |

| | | | | | | |
|-------------|------------|------------|-------------|------------|------------|------|
| ggggcgacgg | tttcaaaagg | ctatttccct | caaaacgtga | gcgaagaaat | tagcggggaa | 1200 |
| gagaccttgt | atcaatggct | ctttaacttc | aataaaaaaga | ttgaaagcgc | tgaggttagg | 1260 |
| aacgcttttag | ggaggatgct | gtttaatggc | gaagagcaag | aaaaatgcgt | gaacgcctta | 1320 |
| agtggggggcg | aaaaacaccg | aatgggttta | tccaagctca | tgctagaggg | ggggaatttt | 1380 |
| ttagtctttag | atgagccaac | caaccatttg | gatttagaag | cgattatcgc | tttaggcgaa | 1440 |
| gcgctcttta | aatttgatgg | ggcgctgatt | tgcgtaagcc | atgacagaga | gctcattgat | 1500 |
| gcgtatgcta | ataggatcat | tgaattagtc | ccaagcccta | aaggcgcttc | aatcattgat | 1560 |
| tttaaaggca | gttatgaaga | gtatttggcg | agcaaaaaa | | | 1599 |

Seq ID 76

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|------------|------|
| atgaataaac | catttttaaat | cttactcata | gccctaattg | tcttttagcgg | ctgtaacatg | 60 |
| agaaaatatt | tcaaacccgc | taaacaccaa | attaaaggcg | aagcgtattt | ccctaaccat | 120 |
| ttgcaagaaa | gtatcggttc | gtctaactcg | tatggagcca | ttttgaaaaa | tgagagcggt | 180 |
| ataggcgata | aagggttaac | gcagctaaga | atcggttaaga | acttcaatta | cgaaagcagt | 240 |
| tttttaaatg | agagtcaagg | gttttttatt | cttgcgcaag | attgtttgaa | caagattgat | 300 |
| aaaaaaacaa | acaaaagcaa | ggtggctaag | actgaagaaa | cgggaattgaa | attaaagggc | 360 |
| gttgaagcgg | aagtccaaga | taaagtctgt | catcaagtgg | aattgattag | caataaccct | 420 |
| aacgccagcc | aacaatctat | cgttattcct | ttggagactt | ttgccttgag | cgcaagcggt | 480 |
| aaagggaaatc | tttttagcgg | ggtgttagcg | gacaattcag | cgaacttata | cgacatcact | 540 |
| tctcaaaaat | tgcttttttag | tgagaaagg | tccccaagca | ccacgatcaa | ttctttaatg | 600 |
| gcgatgccta | tttttatgga | tacggtcgtg | gtgttcccca | tgctagatgg | gcgcttggtg | 660 |
| gtcgtggatt | atgtgcacgg | aaaccctacg | cctattagaa | acattgttat | cagcagcgat | 720 |
| aagtttttta | acaatatcac | ctaccttata | gtagatggca | ataacatgat | cgcttctaca | 780 |
| gggaaaagga | tactctcagt | agtgaagcgt | caagagtcca | actatgatgg | ggatattgtg | 840 |
| gatttgcctt | atgataagg | gactttatat | gtgctcacgc | tagacgggca | gattttgcaa | 900 |
| atggataaga | gtttgagggg | attaaacagc | gtgaaactgc | cttcgctcgt | caacacgatt | 960 |
| gtattaaacc | ataataaatt | gtattcttta | gaaaaacgag | ggatgtgat | agaggtggat | 1020 |
| ttaaatgatt | ttgattcgta | taatgtctat | aaaacgccaa | ctataggcag | ttttaagttt | 1080 |
| ttttcatcta | atcgtttgga | taaaggggtg | ttttatgata | aaaatcggtg | gtattacgat | 1140 |
| cgctactatt | cgattttata | cgattttata | ccaaaacttt | atcccgttgt | ggaaaaatcg | 1200 |
| gcatctaaaa | aatctcaaaa | aggcgaaaaa | gggaacgctc | ctattttatt | gcaagaaagg | 1260 |
| cataaagcta | aagaaaataa | acagccttta | gaagaaaaca | aagttaaacc | aagaaatagc | 1320 |
| gggtttgaag | aagaagaggt | taaaaccaga | aggcctgagc | ctattaggga | tcaaaataac | 1380 |
| gccacccaac | aaggcgaaac | aaaaaacaat | gaaagtaaaa | acgctcctgt | cttaaaagaa | 1440 |
| aacgccccta | aaaaagaaag | gccaaaacca | aattctaaag | aagaaaaacg | ccgcttgaaa | 1500 |
| gaagaaaaga | aaaaagccaa | agccgaacaa | agagcgagag | aatttgaaca | aagagcgaga | 1560 |
| gagcatcaag | aaagagatga | aaaagagctt | gaagaaagaa | gaaaagcttt | agaaatgaat | 1620 |
| aagaag | | | | | | 1626 |

Seq ID 77

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|-----|
| atgaaacgaa | gggattttat | taaaacgact | acttttagcg | ctacaggtgc | tgtttttagga | 60 |
| gcacagattt | tgacagcaga | agaaaagtaaa | gggagtgttg | caaaaataaa | aatagaagct | 120 |
| caatacacga | ttgattttga | ttctgcagaa | cacacttcac | ttttcattcc | catgccaggt | 180 |
| gttgtagcga | gcaatgtgca | tttacaaggc | aatcatgcta | gctataaaaag | catgctcaat | 240 |
| tttggaagtgc | cttatttgca | agtggatttt | tttaaaagca | ctcaaaaaaa | gcaagtccat | 300 |
| ttgtcttatg | agatcgctag | ctatcaattg | aatgagcgtt | tgtttgaaac | gagcgatttt | 360 |
| gtagcaatgg | ggcgttatga | aagagacgat | gcgagcgtgg | ctaacattgc | caaccagctt | 420 |
| aagggaaaca | cccctaagaa | aagcgttcgc | aattttttatg | cgttcatcaa | gcatgagatg | 480 |
| cctaagagac | agaaggcttt | agagggtaaa | gaaaattttac | ctaagcgtga | gagtttgccc | 540 |
| tggtttgcaa | ccatttcaaa | agagagcatg | tttgtgtcct | tatgccatgc | gtgcgggatt | 600 |
| aaaagcgctg | aagtgcagg | cttgaaactg | ggtcaaaaaca | gcgtggtgaa | aaacgctcct | 660 |
| agagtggaa | tgtatttgaa | agattcattt | ctagcgtttg | attttcaaaa | taatcacaa | 720 |
| gaagttttta | tcccgttgaa | tcgtcataaa | gacatgcagt | tagattctgc | cttattggcg | 780 |
| acttttggcg | atgcttttgc | cottgtggat | ggtagggtat | taggcaatta | cgagagcaaa | 840 |
| ctttttgaaa | aaagagtgtc | ctatacgatt | gtc | | | 873 |

Seq ID 78

| | | | | | | |
|-------------|------------|------------|-------------|------------|-------------|-----|
| atgggttaata | aagatgtgaa | acaaaccact | gcttttggcg | ctcccgtttg | ggatgacaac | 60 |
| aatgtgatta | cggccggccc | tagaggtcct | gtttttattac | aaagcacttg | gtttttggaa | 120 |
| aagtttagcgg | cggttgacag | agaaagaatc | cttgaaagg | tggtgcatgc | taaaggaaagc | 180 |
| ggagcttatg | gcactttcac | tgtgactaaa | gacatcacta | aatacactaa | agcgaaaatt | 240 |
| ttctctaaag | tgggcaaaaa | aaccgaatgc | ttcttcagat | tttctactgt | ggctggtgaa | 300 |
| agaggcagtg | cggatgcgg | gagagaccct | agaggttttg | cgatgaagta | ttacactgaa | 360 |
| gaaggtaact | gggatttagt | ggggaacaac | acgcctgttt | tctttatccg | tgatgcgatc | 420 |
| aaattccctg | atttcaccca | cactcaaaaa | cgagactctc | aaaccaattt | gcctaaccat | 480 |
| gacatgggat | gggatttttg | gagtaatgtt | cctgaaagct | tataccaagt | aacatgggtt | 540 |
| atgagcgata | ggggtattcc | taaatctttc | cgccacatgg | atggtttttg | cagccacact | 600 |
| ttcagtcctta | tcaacgcgaa | aggcgaacgc | ttttgggtga | aattccactt | tcacaccatg | 660 |

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|------|
| caaggcggtta | agcattttgac | taacgaagaa | gccgcagaag | ttaggaagta | tgatccggat | 720 |
| tccaatcaaa | gggattttatt | caatgcgac | gctagagggg | atttcccaaa | atggaaatta | 780 |
| agcattcaag | tgatgccaga | agaagatgct | aagaagtatc | gattccatcc | gtttgatgta | 840 |
| actaaaattt | ggtatctcca | agattatcca | ttgatggaag | tgggcattgt | ggagttgaat | 900 |
| aaaaatcctg | aaaactattt | cgcagaagtg | gaacaagcgg | cattcagtc | ggctaagtgc | 960 |
| gttcctggaa | ttggctatag | ccctgatagg | atgttacaag | ggcgcttggt | ctcttatgga | 1020 |
| gacacacacc | gctaccgctt | aggcggtta | tatcctcaaa | taccgggtta | taaaccaaga | 1080 |
| tgcccattcc | actcttctag | cagagatggt | tacatgcaaa | acggatacta | cggctcttta | 1140 |
| caaaactata | cgcctagctc | attgcctggc | tataaagaag | ataagagcgc | gagagatcct | 1200 |
| aagttcaact | tagctcatat | tgagaaagag | tttgaagtgt | ggaattggga | ttacagagct | 1260 |
| gatgatagcg | attactacac | ccaaccagg | gattactacc | gctcattgcc | agctgatgaa | 1320 |
| aaagaaaggt | tgcatgacac | tattggagag | tctttagctc | atgttaccce | taaggaaatt | 1380 |
| gtggataaac | aattggagca | tttcaagaaa | gctgacccca | aatacgctga | gggagttaaa | 1440 |
| aaagctcttg | aaaaacacca | aaaaatgatg | aaagacatgc | atggaaaaga | catgcaccac | 1500 |
| acaaaaaaga | aaaaag | | | | | 1515 |

Seq ID 79

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|-------------|------|
| atgttttttaa | gagtataccc | aaagcttaga | tacgctttat | gtttccccc | actcgctgag | 60 |
| acttgctata | gcgaagagcg | gactttaaat | aaggttacca | cccaagctaa | aaggattttc | 120 |
| acttaacaac | atgagtttaa | agtaacttct | aaagaactag | atcaacgccca | aagcaatgaa | 180 |
| gtcaaggact | tgtttaggac | taaccctgat | gtgaatgtgg | gcgaggggag | cgtgatgggg | 240 |
| cagaaaaatc | atgtgagagg | cgttgaagac | aggcttttaa | gggttacagt | ggatggggct | 300 |
| gcacaaaatg | gcaatatcta | ccaccaccaa | ggcaacaccg | tgattgacct | tggtcatgctc | 360 |
| aaaagcggtg | aagttaccaa | aggcgcgcg | aatgcgagcg | cggggccagg | agcgattgcg | 420 |
| ggagtgatta | aaatggagac | taaaaggagc | gctgatttta | tccctagggg | gaaaaattat | 480 |
| gctgccagtg | ggcggttgag | tttttatacc | aattttggcg | atcgagagac | tttcagatcg | 540 |
| gcttatcaaa | acgcgcattt | tgatattatc | gcttactaca | cgcacccaaa | catcttctat | 600 |
| tatagaagcg | gcgctacagc | gatgaaaaac | cttttcaatc | ccacacaagc | cgataaagag | 660 |
| ccaggaactc | ctagcgagca | aaacaacgct | ttgattaaaa | tgaatggtta | tttgagcgac | 720 |
| agagacacgc | tcactttcag | ctggaacatg | acacgagata | acgctacacg | ccctttaagg | 780 |
| agtaacgcta | taggggttagc | ctatccttgt | gaagccccct | ttagtctctga | tagttctcaa | 840 |
| gggtgtccta | atgtgttaga | tagtttcaca | agatacatgt | atcactctat | taatagtgcc | 900 |
| aacaatcttt | ccttacaata | caaaagggaa | gcgggaaatt | cttttggcga | cccacgatta | 960 |
| gatttttacc | tttatacaag | catcaggaac | gctcagtttg | atccccctatt | tgatccctaat | 1020 |
| ggcgtttatg | ctaaattccc | cactttctta | gcgagcgcat | gggaaaaaga | aaattaccce | 1080 |
| tcggttgaag | gcgcttattg | caccccaagc | ttttcagatg | tgataaaacc | aagctcacag | 1140 |
| cctaggaatt | tgtttttaaa | caacaccggc | ttaaacctta | aagtcgcgca | tgtgattgat | 1200 |
| gaagccacag | acagcctttt | tgaatacggg | ttcaactacc | aaaatttgag | cgtttttgac | 1260 |
| gctcgcatcc | ctaaatcaga | attatacagg | cctaactcaag | tttatactga | tgataaagga | 1320 |
| caaaaacaaa | tcgcttgctc | tctgtgta | aataacccca | atgacccac | tctgtgcca | 1380 |
| agagggaag | cgaacgggaa | tatttatgga | ggctacgtgc | aagcgaatta | ctcgctcat | 1440 |
| aaaatcatca | cttttgagc | cggggtaagg | tgggacgctt | acacgcttta | tgataaagac | 1500 |
| tggaaccacc | gctacactca | aggcttttag | cctagcgcg | ctcttggtg | aagccccatt | 1560 |
| gagcctttat | tttataaaat | cacttattct | caagttacaa | gaggggtgat | gccaggagat | 1620 |
| ggcggtgaca | tcgctcaaaa | cgatttacga | tacgccaaaa | acatcaagcc | tgaaagtggg | 1680 |
| tctaaccgctg | aatttaatat | tgattattca | agccagtatt | ttagcgggag | ggctgcggcg | 1740 |
| ttttatcagg | ctttggataa | tttcatctca | caatacgcac | aaaatttgat | tgtaaccaat | 1800 |
| ttgagtcaag | cgattcgtat | ttatggctat | gaagtgggtg | ggactttcag | atacaagggc | 1860 |
| gtgagtttga | atgtaggggt | ctcgcgacc | tgccccacca | ctagggggta | tttaattggcg | 1920 |
| gatagctatg | agcttgccgc | aagcacgggt | aatgttttta | tcatcaaatt | ggattacacc | 1980 |
| atccccaaaa | cagggatcaa | tcttgcatgg | cttagccgct | ttgttaccgg | tttagattat | 2040 |
| tgcggggttg | atatttactt | gcctgattat | gggacggctg | agaaacccaa | aaccctacc | 2100 |
| gatttagcca | aatgcggatc | tcaattaggg | ttagtgcata | tgcataaacc | gggctatggc | 2160 |
| gtgagtaatt | tttataatcaa | ttggagtcct | aaaacccaaa | gccgctggaa | gggtttgttg | 2220 |
| ctttcagccg | tgtttaataa | tgttttcaac | aaattctatg | tgatcaaac | aagcccttat | 2280 |
| gtcatgagcc | cggatatgcc | aggcactgac | gctgttaaaa | gagcgatcgc | tgagcctggg | 2340 |
| tttaacgcgc | gttttgaagt | ggcttacaaa | tgg | | | 2373 |

Seq ID 80

| | | | | | | |
|------------|------------|------------|-------------|------------|-------------|-----|
| atggaaatc | aacaaacaca | ccgcaaaatc | aatcgccctt | tggtttctct | cgcttttagta | 60 |
| ggagcgtag | tcagcatcac | accgcaacaa | agtcagccg | cttttttcac | aaccgtgatc | 120 |
| attccagcca | ttgttggggg | gattgctaca | ggcgctgctg | taggaacggg | ctcagggctt | 180 |
| cttggtcggg | ggctaaaaca | agccgaagaa | gccataaaaa | ccccagataa | acccgataaa | 240 |
| gtttggcgca | ttcaagcagg | aaaaggcttt | aatgaattcc | ctaacaagga | atacgactta | 300 |
| tacagatccc | tactatctag | taagattgat | ggagctggg | attgggggaa | tgccgctacg | 360 |
| cattattggg | tcaaaggcgg | gcaatggaac | agccttgaag | tggaatgaa | agacgctgta | 420 |
| gggacttata | atctctcagg | gctaagaaac | tttactgggtg | gggatttaga | tgtcaatatg | 480 |
| caaaaagcca | ctttgcgctt | gggccaattc | aatggcaatt | ctttcacaag | ctataaggat | 540 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| agcgcgtgac | gcaccacgag | agtggatttc | aacgcataaa | atatcttaat | tgataatfff | 600 |
| ttagaaatca | ataatcgtgt | gggttctgga | gccgggagga | aagccagctc | tacgggtttta | 660 |
| acttttgcaag | cttcagaagg | gattactagc | agtaaaaatg | cggaaatttc | tctttatgat | 720 |
| ggcgccacgc | tcaattttggc | gttttgggagc | gttaaatata | tgggtaattgt | gtggatgggc | 780 |
| cgttttgcaat | atgtggggagc | gtattttggcc | ccttcataca | gcacgataaa | cacttcaaaa | 840 |
| gtgacagggg | aagtgaattt | taaccatctc | actgtggggc | atcacaacgc | cgctcaagca | 900 |
| ggcattatcg | ctagtaacaa | gactcatatt | ggcacactgg | atgtgtggca | aagcgcgggga | 960 |
| ctaaacatta | tcgcccctcc | agaaggcggg | tataaggata | aacctaaagg | taaacctagt | 1020 |
| aacaccacgc | aaaataatgc | taacaacaac | caacaaaaca | gcgctcaaaa | caatagtaac | 1080 |
| actcagggtta | tttaaccacc | caatagcgcg | caaaaaacag | aaattcaacc | cacgcaagtc | 1140 |
| attgatgggc | cttttgcgtg | tggtcaagac | acgggttgca | atattgatcg | catcaacact | 1200 |
| aacgcgtgatg | gcacgattaa | agtgggaggg | tataaagcct | ctcttaccac | caatgcggct | 1260 |
| cattttgcata | tcggcaaaag | cggtatcaat | ctgtccaatc | aagcgagcgg | gcgcaccctt | 1320 |
| ttagtggaaa | atctaaccgg | gaatatcacc | gttgatgggc | ctttaagagt | gaataatcaa | 1380 |
| gtgggtgggtt | atgctttggc | aggatcaagc | gcgaattttg | agtttaaggc | tggtacggat | 1440 |
| acaaaaaacg | gcacagccac | ttttaataac | gatattagtt | tggaagatt | tgtgaattta | 1500 |
| aaagtggatg | ctcatacagc | taattttaaa | ggatttgata | ctggtaattg | tggtttcaac | 1560 |
| accttagatt | ttagtggcgt | tacaggttaag | gtcaatatca | acaagctcat | tacggcttcc | 1620 |
| actaatgtgg | ccgttaaaaa | cttcaacatt | aatgaattgg | ttgttaagac | caatgggggtg | 1680 |
| agtgtggggg | aatacactca | tttttagcga | gatataaggc | gtcaatcgcg | catcaatacc | 1740 |
| gtgcgtttgg | aaactggcac | taggtcaatc | ttttctgggg | gtgtcaaatt | taaaagcggg | 1800 |
| gaaaaactgg | ttatagatga | gttttactat | agcccttgga | attattttga | cgctaggaat | 1860 |
| attaaaaatg | ttgaaatcac | cagaaaattc | gcttcttcaa | ccccagaaaa | cccttggggc | 1920 |
| acatcaaagc | ttatgtttta | taatctaacc | ctgggtcaaa | atgcggctcat | ggactatagt | 1980 |
| caatttttcaa | atttaaccat | tcagggggat | ttcatcaaca | atcaaggcac | tatcaattat | 2040 |
| ttggtccgag | gcgggcaagt | agccaccttg | aatgtaggca | atgcggcagc | tatgttcttt | 2100 |
| agtaataatg | tggtatagcg | gactgggttt | taccaaccgc | tcataagat | taacagcgct | 2160 |
| caagatctca | ttaaaaataa | agaacatgtc | ttattgaaag | cgaaaatcat | cggttatggc | 2220 |
| aatgtttctt | taggcactaa | cagcattagt | aatgttaatc | taatagagca | attcaaaag | 2280 |
| cgactagccc | tttacaacaa | caataaccgc | atggatattt | gtgtgggtg | aaatactgat | 2340 |
| gacattaaag | catgcgggac | ggctatcggc | aatcaaagca | tggtgaataa | ccccgacaat | 2400 |
| tacaagtatc | ttatcggtta | agcatggaag | aacataggga | tcagcaaaac | agctaattggc | 2460 |
| tctaaaaattt | cggtgtatta | tttaggcaat | tctacgccta | ctgagaaagg | tggtcaatacc | 2520 |
| acaaattttac | ctacaaacac | cactagcaat | gtgcgttctg | ccaacaacgc | ccttgcgcaa | 2580 |
| aacgctcctt | tcgctcaacc | tagcgccact | cctaattttag | tcgctatcaa | tcagctgat | 2640 |
| tttggcacca | ttgaaagcgt | gtttgaattg | gctaaccgct | ctaaagatat | tgacacgctt | 2700 |
| tatgctaact | caggcgcgca | aggcagggat | ctcttacaaa | ccttattgat | tgatagccat | 2760 |
| gatgcgggtt | atgccagaca | aatgattgat | aacacaagca | cgggtgaaat | caccaagcaa | 2820 |
| ttgaatgcgg | ccactaccac | tttaaacac | atgccagtt | tagagcataa | gacaagcagc | 2880 |
| ttcaaaactt | tgagcttgag | taatgcgatg | atcttaaat | ctcgtttagt | caatctctcc | 2940 |
| agaaggcaca | ccaataatat | tgactcattc | gcccacgcgt | tacaagcttt | aaaagaccaa | 3000 |
| aaattcgctt | cttttagaaa | cgcgccggaa | gtgtgttatc | aatttgcccc | taaatatgaa | 3060 |
| aaacctacca | atgtttgggc | taacgcattt | gggggaacga | gcttgaataa | tggtgggcaac | 3120 |
| gcttcattgt | atggcacaag | tgccggcgta | gatgcctacc | ttaatgggga | agtgggaagc | 3180 |
| attgtggcgg | gttttgggag | ctatgggttat | agctctttta | ataatcaagc | gaactctctt | 3240 |
| aactctggag | ccaataacac | taattttggc | gtgtatagcc | gtatctttgc | taaccagcat | 3300 |
| gaatttgatt | ttgaagctca | agggcgctca | gggagtgatc | aatcaagctt | gaatttcaaa | 3360 |
| agcgctctat | tcgagagatt | gaatcaaagc | tataattact | tagcctatag | cgctgcaaca | 3420 |
| agagcgagct | atggttatga | ctttgcattt | tttaggaacg | ctttgggtgt | aaaaccaagc | 3480 |
| gtgggcgtga | gctataacca | tttaggttca | accaacttta | aaagcaatag | caatcaagt | 3540 |
| gctttgaaaa | atggctctag | cagtcagcat | ttattcaacg | ctagcgctaa | tgtggaagcg | 3600 |
| cgctattatt | atggggacac | ttcatacttc | tatatgaacg | ctggagtttt | acaagaattt | 3660 |
| gctaactttg | gttctagcaa | tcgggtatct | ttaaacacct | ttaaagtga | tgccgcacac | 3720 |
| aatcctttta | gtaccocatg | cagagtgatg | atgggtgggg | aattaaaatt | agctaaagaa | 3780 |
| gtgtttttga | atttgggctt | tgtttatatt | cacaatttga | tttccaatat | aggccatttc | 3840 |
| gcttccaatt | taggaatgag | gtatagtttc | | | | 3870 |

Seq ID 81

| | | | | | | |
|------------|------------|-------------|-------------|------------|------------|-----|
| atgcctcaaa | tacaatcatc | gcattccaat | cattttgatt | tcactataga | cacggcggat | 60 |
| cgactaaat | tattgatgag | ctatttagtc | gtgcctacaa | cggctaattt | caacaatgtc | 120 |
| atgcattggg | gggaattatt | gaatttattg | gataaagtgg | cttatgtgtg | ttcgactcgt | 180 |
| tattgcgcta | aaggaaacgg | cacttttaagc | gtggatgggg | ttacttttaa | atacccatt | 240 |
| cctgtaggga | atttgcctac | ttttttagcc | agcatcaatt | atgtgggcaa | cacctcgtgc | 300 |
| gaagtgggga | ttaaggtttt | gagcgaagac | attaaaaactc | gtgaaatcac | gcacacgaac | 360 |
| tcatgttatt | tcacccatgg | ggctgtagaa | aatggcaaac | ccaccccat | gcctaaatac | 420 |
| gagcctaaaa | cagaggttga | aatccgccgt | tatgaagggg | ctttaaagcg | caaggaaatg | 480 |
| cgcacacgag | ggtattttaa | aagcgggaaa | cacgagggtg | tt | | 522 |

Seq ID 82

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|------------|------|
| ttgaataatt | tagacattaa | aacttttaggg | cagggttttca | cccctaaaaa | gatagtggat | 60 |
| ttcatgctca | ctctcaaaaca | caatcatggg | agtgttttag | aaccgagtg | tggcgatggg | 120 |
| agtttttttaa | agcgcttaaa | aaaggccgta | aggattgaaa | tcgatcctaa | aatctgccct | 180 |
| aaaaatgccc | tttgcattga | cttttttgac | taccttttag | aaaatcaatt | tgacaccatt | 240 |
| attggtaacc | cgccctatgt | caagcacaag | gatattgcgc | caagcaccaa | agaaaaactc | 300 |
| cattacagcc | tttttgatga | aaggagtaat | ctctacttgt | ttttcataga | aaaagcgatc | 360 |
| aagcatttaa | aacctaaagg | cgaattgatt | ttcatcacc | caagggattt | tttaaaatcc | 420 |
| acttctagcg | tgaattataa | cgaatggatt | tataaagaag | gcacgataac | gcattttttt | 480 |
| gaactggg | atcaaaaggt | tttcccaaac | gccatgccta | attgcgtgat | ttttcgtttt | 540 |
| tgtaagggtta | atttcagtag | aatcaccaac | gatggtttgc | aatttttgtg | caaaaaaggc | 600 |
| attttgtatt | tcctcaacca | atcttacacg | caaaaattaa | gcgaggtttt | taagggttaa | 660 |
| gtgggggag | tgagcggtg | cgataagatt | tttaaaaatg | aaaaatacgg | gaatttagaa | 720 |
| tttgctacct | caatcacgaa | aagaaccaat | gctttagaaa | aaatggtttt | tgtcaatgag | 780 |
| cctaattgatt | atttactcca | gcataaagac | agcttaatgc | aaagaaagat | taaaaaattc | 840 |
| aatgaaaata | actgggttga | gtgggggaga | atgcatcaca | tatcccctaa | aaaacgcatt | 900 |
| tatgtcaacg | ccaaaacgca | ccaaaaaac | ccctttttta | tccaccaatg | ccctaattat | 960 |
| gacggctcta | tttttagcgt | attcccttat | aacccaaacc | tggacttaca | aatctctctg | 1020 |
| gacaaactca | acgctatcaa | ctggcaagaa | ttaggctttg | tgtgcggcgg | gcgttttttg | 1080 |
| ttttcgcagc | gctctttaga | aaacgcgctt | ttgcctaaag | acttttttaa | tctagga | 1137 |

Seq ID 83

| | | | | | | |
|-------------|------------|------------|-------------|-------------|------------|------|
| atgaaacaaa | atttaaagcc | attcaaaatg | attaaggaaa | atttaatgac | acaatctcaa | 60 |
| aaagtaagat | tcttagcccc | tttaagccta | gcgttaagct | tgagcttcaa | tccagtgggc | 120 |
| gctgaagaag | atgggggctt | tatgaccttt | gggttagaatt | taggtcaggt | ggtccaacaa | 180 |
| gtgaaaacc | cggttaaaat | caaagccgaa | gaattagccg | gcttggttaa | ctctaatacg | 240 |
| acaaacaaca | ccaataccaa | tattgcaggc | acaggaggca | atgtcgccgg | gactttgggc | 300 |
| aacctcttta | tgaaccaact | aggcaatttg | attgatttgt | atcccathtt | gaacactaaa | 360 |
| aatatccatc | aatgtgttac | tactaataat | ggtagtagta | gtgcgaccac | tgacgcccgt | 420 |
| actactaaca | atggcctttg | tttccaaggt | aacctggatc | tttataacga | aatggttggc | 480 |
| tctatcaaaa | cttttagtca | aaacatcagc | aagaacatct | ttcaaggcaa | caacaacacc | 540 |
| acgagccaaa | acctctccaa | ccagctcagt | gagcttaaca | ccgctagcgt | ttatttgact | 600 |
| tacatgaact | ccttctttaa | cgctaacaac | caagcgggtg | ggatttttca | aaacaacact | 660 |
| aatcaagctt | atggaaatgg | tgttaccgct | caacaaatcg | cttatatcct | aaagcaagct | 720 |
| tcaatcacta | tggggccaag | cggtgatagc | ggggctgccg | cagcgttttt | ggacgcgct | 780 |
| ttagcgcaac | atgttttcaa | ctccgctaac | gcccgggaacg | atttgagcgc | taaggaattc | 840 |
| actagcttgg | tgcaaaacat | cgtcaataat | tctcaaaacg | ctttaacgct | agccaacaac | 900 |
| gctaacaatca | gcaattcaac | cggctatcaa | gtgagctatg | gcgggcatat | tgatcaagcg | 960 |
| cgctctaccc | aactgtttaa | caacaccaca | aacacttttg | ctaaagttaac | cgctctaacc | 1020 |
| aacgagctta | aagcttaacc | atggcttggg | attttcgctg | ccggttaacag | ctctcaagtg | 1080 |
| aatgcgttta | acgggtttat | cactaaaatc | ggttataagc | aattcttttg | ggaaaacaag | 1140 |
| aatgtgggct | tacgctacta | cggcttcttc | agctataatg | gcgcgggctg | gggtaatggc | 1200 |
| cccacttaca | atcaagtcaa | tctgctcact | tatgggggtg | ggactgatgt | gctttacaat | 1260 |
| gtgtttagcc | gctcttttgg | tagccgaagt | cttaatgcgg | gcttcttttg | ggggatccaa | 1320 |
| ctcgcagggg | atacttacat | cagcacgcta | agaaacagcc | ctcaacttgc | gaatagaccc | 1380 |
| acagcgacga | aattccaatt | cttggttgat | gtgggggttac | gcatgaactt | tggtatcttg | 1440 |
| aaaaaagact | tgaaaagcca | taaccagcat | tctatagaaa | tcggtgtgca | aatccctacg | 1500 |
| atttacaaca | cttattataa | agctggcgcc | gctgaagtga | aatacttccg | cccttatagc | 1560 |
| gtgtattggg | tctatggcta | cgccttc | | | | 1587 |

Seq ID 84

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| atggcgctta | aaaaggccag | gttgatttcc | aagtttat | caaagggatc | tttcaaattg | 60 |
| aataagatct | caaagaaaat | tttcacattg | aatcaaatct | taaaatgtga | aaagccctta | 120 |
| aaacgccata | aaaaagcttt | aaaacctatt | aaaaagctct | ctaactcgaa | caaatctttt | 180 |
| ttaaaagctt | cggttttatt | gataggagcg | ttaggggggg | tatcccacct | aagggttaac | 240 |
| gaatgcgctt | attggctatg | gtcgtcttgg | agttaccaag | ataatattga | aagcggctct | 300 |
| aattcgccca | cgcacaactc | ttattgcctt | tttagtagca | ctcaaggctc | tgggacttat | 360 |
| tattttaaca | ctcttaccac | ttatagcgct | gggtggggcta | gtttcacgca | aaaattcaat | 420 |
| aacggcacgc | ttaatgtggg | agagaatatc | cgctttggag | gcacaggtat | taatgggggt | 480 |
| gatgtcggtt | atatcacagg | aacttatgac | gctcaaacga | ttaattttta | ttctagccat | 540 |
| ttacaacccg | gaaactcata | cgctgatggg | gggtggggcca | cgctcaattt | taatgcggcc | 600 |
| aataatatca | ctatcaatca | agcgagtttt | gacaatagcc | atgcagggac | gcaaaaatct | 660 |
| tacatgaatt | ttaaaggctc | taatatacaag | gtcagtggtt | ctagttttac | agatgatact | 720 |
| gatgggggct | ttagtttcag | cggtaatagt | aataacagca | ccatctcctt | taatcaaacg | 780 |
| agctttcaatc | aagggaactta | tcacttttagt | aatagcgcca | ctttaagctt | caatcatagc | 840 |
| gctttcaatc | aagggaactta | taactttta | agcactcaat | ctgcttttaa | taacagcgct | 900 |
| ttcaatcaag | ggacttatca | tttcaatggc | aacgccagct | ttgataacga | cactttcaat | 960 |
| caaggcactt | atagctttta | taccagcaag | gtgagtttct | caggcatcaa | cacttttaaat | 1020 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| tcaagttcgc | cttttgctag | cottaaaggc | agtgtgtctt | ttggttctga | tgcgattttt | 1080 |
| aacctcaatc | aaacccttaa | taatcaaacc | tatgatattc | tcactacaaa | cggggcgatc | 1140 |
| cagtatgggg | tttatcaaag | ctatttgtgg | gatctaatac | actataaggg | cgataaagcc | 1200 |
| attagccatg | ttgaagtggg | caataacact | tatgatgtaa | cctttgatat | taacgggcaa | 1260 |
| gatgaaacct | tacaagaaac | ctttaacaaa | caatccatta | ttaccaattt | tttaggagat | 1320 |
| gatttacaac | aacaagccca | aaaaacctac | caacaagact | tgagcaactc | ccaaagcgct | 1380 |
| ttaaataacg | ctgctagtga | taataagatc | gcaaatagcg | atacagacta | caccaagaat | 1440 |
| aaaaacgcca | ctatcaaaaa | agacgctcaa | ggtttagaaa | acaccaacca | acaaatcgct | 1500 |
| caagatgaac | aagcgttaca | aggagattta | gacaagctca | aacaattagc | caactcccca | 1560 |
| acaggcttta | gtgaaccaagc | tttcaatcaa | gctcaaaaac | aagaaccaaca | agatgaacaa | 1620 |
| accttcaaaa | acgaagaaaa | gacttttaaat | agcgagcaag | agggattgaa | acaagcgata | 1680 |
| caacaagcac | aagcccaaca | acaaaaacaa | caacaaaaac | aagaaccaaca | acaagcccaa | 1740 |
| caaacctatc | aagaggatct | cactcattcc | caaagcgctt | tgaatgatgt | ggctagcgac | 1800 |
| aacacgatcg | caagcaatga | tacaaactac | accaacaatc | aaaacaccgc | tatcaaagaa | 1860 |
| gacgctcaag | gttttagaaaa | caccaaccaa | caaatcgctc | aagatgaaca | agcgttacaa | 1920 |
| ggagatttag | acaagctcaa | acaattagcc | aactcccca | caggcttttag | tgaacaagct | 1980 |
| ttcaatcaag | ctcaaaaaaca | agaacaacaa | gatgaacaaa | ccttacaaaa | cgaagaaaag | 2040 |
| actttttaata | gcgagcaaga | gagattgaag | caagcgatag | ctaacgctaa | gcctacaagc | 2100 |
| cccacacca | gccattgcacc | cactcctaca | aaacacaccg | cgccaaacac | tcctccta | 2160 |
| aaagttccca | ccacaccccc | tactcaaaat | ccacctgcag | aaagcgtgtg | gagtggggtt | 2220 |
| tattggcttc | aaaacaaaaac | ctactcaaac | aaaggcattt | attatattga | tcccaatctt | 2280 |
| tcaggacaga | gcggtcaaag | cggcaacacg | ctcagcactt | atacagctaa | tttgtttgga | 2340 |
| agaagtttta | gcgttaatat | ccaaaatggc | actttgatca | tagggaataa | tacagagagc | 2400 |
| gtgaatagta | atgggttgat | ttggataggg | catggaggtt | ttggctatat | tacgggaact | 2460 |
| tttagtgcg | cttgacattta | cattttaaaa | cgggtgaagg | cggttcaaat | ogtttcaaat | 2520 |
| tcagatgggtg | ggggagcgaa | cattaccttt | aaagcaagcg | ataatatcac | tatggatggc | 2580 |
| ttgaattata | atgacgctga | aaccgttact | aaaatgattc | aaacaggggc | tagccagcat | 2640 |
| tcctatgccca | cttttgacgc | tctaaataat | atcagcgtga | ctaattccag | ttttagcgat | 2700 |
| atgacttggg | gaaaattcag | ttttagcgct | aagaatatatt | cgttttctaa | cgcttcgctc | 2760 |
| agcggcttta | caaaccttgg | aggatcaagc | gttattagcg | ctaacgctac | taattcttta | 2820 |
| agctttatca | attctcgttt | gaatggggga | gcggtttata | atttgcaggc | taatagcctt | 2880 |
| attttcaata | acacgcaagc | ggttttta | gtcttgattt | ctagggggac | aagcaatttt | 2940 |
| aacgccacca | cacagctttt | aggcaacacg | aattttacgc | tcagttctca | aagtttggtg | 3000 |
| aatttttaag | gcgatacaac | cttgcaaaac | aacgccaata | tcacgcttgg | caataaaagt | 3060 |
| caagccgttt | taaaaaattc | tttaacgctt | taataataatt | ctaatttgag | tttagacaat | 3120 |
| caaagcgttt | tgaatgcgaa | taacacagc | gcttttaaca | atcaagcgag | tctcaatatt | 3180 |
| tataacggga | gtcaagcgac | ctttaatagc | ctctttttta | atggcgggac | actcagctct | 3240 |
| aacgctagta | gcaagctcaa | cgcttcta | gctagttttt | caaacaacac | cactatcaat | 3300 |
| ttagacgata | gcgtttttatc | ggctagtaac | acaagctctt | taaacgctaa | tatcaatttt | 3360 |
| caagcgctca | ccagcgctga | ttttggaggc | aacacgatta | ttgatacagc | gagctttta | 3420 |
| tttgacagcg | caagttcatt | gaattttaac | aaccttacgg | ctaattggagc | gttaattttt | 3480 |
| aatgggttata | cgccctcttt | gactaaggct | ttaatgagcg | ttagcgggca | gtttgtttta | 3540 |
| gggaataatg | gggatattaa | tttatctgac | atcaatattt | ttgataacat | cacaaaatct | 3600 |
| gtaacctaca | acatcctaaa | cgctcaaaaa | gggattactg | gcacagtggt | ggctaattggc | 3660 |
| tatgaaaaaa | tcctttttta | tgccatgaaa | atccaaaacg | ctacctatag | cgacaacaat | 3720 |
| aacatccaaa | cttggtcggt | tataaacctt | ctcaattctt | ctcaaatcat | tcaagagagc | 3780 |
| attaaaaatg | gggatttaac | catagaagtt | ttaaataacc | ccaactcggc | ttccaacact | 3840 |
| attttcaata | tcgctcctga | gctttataat | taccaagctt | ctaagcaaaa | tcctaccggc | 3900 |
| tatagctatg | attatagcga | caatcaagca | ggcacttatt | acttgacaag | caacattaaa | 3960 |
| ggtcttttca | cccctaaggg | ctctcaaaact | cctcaagccc | caggcactta | tagcccgttt | 4020 |
| aaccagcctt | tgagtagttt | gaatatctac | aataagggtt | tttctagcga | gaatttaaaa | 4080 |
| acgcttttag | ggatcctttc | tcaaaattcc | gctaccttaa | aagaaatgat | tgaatccaac | 4140 |
| caactagaca | atatcactaa | cattaatgaa | gtgttgcaac | tcttagacaa | gattaaaatc | 4200 |
| acccaagtgc | aaaagcaagc | actcctagaa | acgatcaacc | atttgactga | caacatcaat | 4260 |
| caaaccttta | ataatgggaa | tctaattata | aagcgtactc | aagataatgt | tacaaaactc | 4320 |
| actagctcta | tatggttttg | gggcaatggc | tatagcagtc | cttgacgct | agatagcgcc | 4380 |
| acttgttctt | cttttagaaa | cacttactta | gggcaattat | taggctcaac | ttccccttat | 4440 |
| ttaggctaca | ttaacgctga | ttttaagct | aaaagcattt | atattaccgg | aacaattgga | 4500 |
| agtggtaacg | cctttgaaag | cggagggagc | gcggatgtaa | cctttcaaag | cgctaataac | 4560 |
| tatgtgttga | ataaagccaa | catagaagct | acaatatctt | taattctttg | taattctttg | 4620 |
| ggcaaaaaag | ggattgagaa | aatctttaat | caagggaatt | tagcgaatgt | tctcagtcaa | 4680 |
| gtggctatgg | aaaaaatcaa | gcaagccggc | ggtttaggaa | actttataga | aaacgctcta | 4740 |
| agccctttga | gtaaggaatt | gcccgttagc | ttgcaaaatg | aaaccttagg | ccaacttata | 4800 |
| ggtcaaaata | acttagatga | tttattgaat | aatagcgggg | tcatgaatgc | aatccaaaat | 4860 |
| attatcagta | aaaaactaag | catttttggt | aattttggtt | ccccatccat | catagaaaac | 4920 |
| taccttgcta | agcagctctt | aaaaagcatg | ctagacgata | aagggttttt | gaattttatc | 4980 |
| ggtgggtata | tgaacgcttc | tgaattaaat | tctattttta | gcgtgggttt | aaaagatatt | 5040 |
| actaatcccc | ctacaagctt | gcaaaaagac | atcggtgtgg | tagcgaacga | cttgttgaa | 5100 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| gagtttttag | gacaagatgt | tatcaaaaag | ctagaaagtc | aaggcttagt | gagtaatatc | 5160 |
| attaataata | tcattttctca | aggcgggtta | agcggcggtt | ataatcaagg | tttagggagc | 5220 |
| gtgttgccgc | cctcttttaca | aaacgcgctc | aaagaaaacg | atntaggcac | tcttttatcg | 5280 |
| cctagaggct | tgcatgattt | ttggcaaaaa | gggtatttta | actttttaag | caatggctat | 5340 |
| gtttttgtca | ataacagctc | ttttagcaac | gctacaggag | gcagtttgaa | ttttgtcgcc | 5400 |
| aacaagtcta | ttatttttaa | tggcgataat | acgattgact | ttagcaagta | tcagggcgca | 5460 |
| ttgatttttg | cttctaataga | tgtttctaat | atcaatatca | ccaccctaaa | cgctactaat | 5520 |
| ggcttaagcc | ttaatgcggg | tttgaataac | gtgagcggtc | aaaaagggga | aattttgtgc | 5580 |
| aatttagcca | attgccccac | aaccaaaaac | agctcttcta | caaactctag | cgtaaccccc | 5640 |
| actaatgaat | ctttaagcgt | gcgcgctaac | aacttcactt | tcttaggcgc | aatcgcttct | 5700 |
| aatggggcta | ttgattttgtc | tcaagtgaat | aataatagcg | ttatagacac | gctcaatctt | 5760 |
| aatgaaaatg | cggccttgca | agccaataat | ttacagatca | ctaacgcttt | taacaacgce | 5820 |
| tctaactcta | cagctaacat | taatggtaat | ttcaccttaa | accaacaagc | gaccttaagc | 5880 |
| actaacgcta | gtggcttgaa | tgtcatgggg | aattttaata | gctatggcga | tttgggtgtt | 5940 |
| aacctcagcc | attcagtttag | ccatgccatt | aaggcagctc | aaggcagtg | gacaatcatg | 6000 |
| gctaataaca | ataacccctt | aatccaattc | aacacttctt | caaaagaagt | tggcacttac | 6060 |
| acgcttattg | atagcgctaa | agccatttat | tacgggtata | acaaccaa | cacaggaggc | 6120 |
| agtagcctag | ataattacct | taagctttac | actcttattg | atattaatgg | caagcacatg | 6180 |
| gtgatgactg | acaacggctt | aacctataac | gggcaagccg | tgagtgttaa | agatggcggt | 6240 |
| ttagtgtgtg | gcttttaaga | ctctcaaaat | caatatattt | acacttccat | tctttataat | 6300 |
| aaagtgaata | tcgctgtttc | taatgatcct | atcaataacc | tacaagcccc | cactttaaaa | 6360 |
| caatacatcg | ctcaaattca | gggcactcaa | ggcgtggata | gcattgatca | agctggaggc | 6420 |
| agccaagcga | ttaatgggct | caataaaaatc | tttgaaacta | agggaagtcc | tttattcgct | 6480 |
| ccctattatt | tagaaagcca | ttccacaaaa | gattttaacca | cgatcgctgg | agatattgct | 6540 |
| aacacttttg | agtcctcgc | taaccctaat | tttaaaaatg | acgccacca | tattttacag | 6600 |
| atcaacacct | acacgcagca | aatgagccgt | ttagccaagc | tctctgacac | ttcaactttt | 6660 |
| gctagcgctg | attttcacga | gcgattagaa | gcccttaaaa | acaagcgatt | cgctgatg | 6720 |
| atccctaacg | ctatggatgt | gatttttaaaa | tactctcaaa | gaaacagagt | caaaaaataat | 6780 |
| gtatgggcga | caggagttgg | aggggctagt | ttcattaatg | gaggcactgg | gactttatat | 6840 |
| ggatccaatg | tagggtagta | ccgattttat | aaggcgctga | ttgtgggggg | ttatgcgcgt | 6900 |
| tatgggtata | gcgggtttca | tgcaaacatc | actcaatcag | gctctagcaa | tgtcaatatg | 6960 |
| gggtgtttata | gccgagcggt | tatcaaaaaga | agcgaattaa | cgatgagctt | gaatgagact | 7020 |
| tggggataca | ataagacttt | catcaactct | tatgaccccc | tactctcaat | catcaatcag | 7080 |
| tcttacaaat | acgacacctg | gacgactgac | gctaaaatca | attatggcta | tgatttcatg | 7140 |
| tttaaaagata | aaagcgttat | ttttaaacct | tttaaatagg | tagcctatta | ttacattggg | 7200 |
| ttgtctgggt | taaggggcat | tatggatgat | cctattttaca | atcagttcag | agccaatgct | 7260 |
| gatcctaata | aaaaatccgt | tctaacgatt | aattttgtct | tagaaagtcg | gcactacttc | 7320 |
| aataaaaaact | cttattatttt | tgtgattg | gatgtgggca | gagattttatt | tatttaattct | 7380 |
| atgggggata | aaatgggtg | ttttatttgg | aataaacacc | taagctatag | agatggcggc | 7440 |
| agataacaaca | cttttgcctag | cattatcac | ggcggggaga | taaggttatt | caaaaccttt | 7500 |
| tatgtgaatg | cgggcattgg | ggctaggttt | gggcttgatt | ataaagatat | taatatacacc | 7560 |
| ggaaatatgt | gtatgcgcta | tgcctttt | | | | 7587 |

Seq ID 85

| | | | | | | |
|-------------|-------------|------------|------------|-------------|------------|-----|
| atgaataactt | ataaaaaacag | cttgaatcac | tttttaaat | tagtggattg | tttagaaaaa | 60 |
| atccccaatg | tgggtaaaaa | gtccgccttt | aaaatggcgt | atcatttggg | tttagaaaac | 120 |
| ccctatctgg | cgctaaaaat | cacgcacgct | ttagagaacg | ccctagaaaa | ccttaaaaca | 180 |
| tgttcatctt | gtaacgcgct | cagcgagagt | gaggtttgtg | agatttgctc | tgatgaaagc | 240 |
| cgacaaaatt | ctcagctttg | catgggtttt | cacccaagag | atgtgtttat | tttagaagat | 300 |
| ttaaaggatt | ttttagggcg | ctattatgtg | ttaaactcca | tagaagaagt | ggattttaac | 360 |
| gccctagaaa | aacgcctgat | tgaagaaaac | attaaagaaa | tcattttttgc | tttccctccc | 420 |
| acttttagcta | atgattctct | aatgctttat | attgaagaca | aattacagca | tttccacctc | 480 |
| actttcacta | aaatcgctca | aggcgtgcct | actggagtga | attttgaaaa | cattgactca | 540 |
| gtttcgctct | caagggcggt | taattcaagg | atcaaagca | | | 579 |

Seq ID 86

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| ttgtttaaaa | gaatgggttt | aatcgctctt | ttaggggtgt | tttcaagcgt | ttcattaagc | 60 |
| gctaagagtc | ttttaagaga | tgatgggatt | ttagtctctg | atttaaagg | catgaaatca | 120 |
| gaactatctg | atgctcctgc | ttgggttttt | gaagacgcta | aagcccccta | cgaagaaatg | 180 |
| ggcgtggcgt | atatccctgt | taataataaa | tatttaggga | ttgagcaagc | gaccttaaac | 240 |
| gctaaattga | gtctgatcgt | gggtttttcat | gaaatcatga | tgaagtataa | aaaacgcttc | 300 |
| atggagcaat | tccatgagtc | cgagcagacg | actacgaata | tcagttacgc | tatctataat | 360 |
| tatctagcga | ctaagatcca | ggatccaac | acctacacga | atttaaaatc | ggaggtggcg | 420 |
| gtgggtgaaa | tcaagctagt | gggttgtcag | attgagcaaa | tcaaaaggta | tttaaaagcg | 480 |
| agcgttgaaa | accttaacga | taatgaaatc | gcttacatcg | ctaaggtcgc | tcaaaaagaa | 540 |
| tttggtagcg | tttgtgcgtt | aagg | | | | 564 |

Seq ID 87

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|-------------|------|
| ttgaaacatt | taaccccact | cactcacacc | atctttaaag | ccttatggct | aggcacagcc | 60 |
| ttaagtgc | ctttaagttt | agccgcaaca | gaaagcccca | ctaaaaacaga | gcctaagccc | 120 |
| gctaaagggg | ttaaaaaacaa | gcccaaatcg | cccgttacta | aagtcattgat | gaccaattgc | 180 |
| gacaatatta | aagattttta | cgctaagcaa | aaagaagtct | taaaaagccgc | ttatcaattc | 240 |
| ggctctaaag | aaaattttag | ctatgaaatg | gcaggcattg | catggaaaga | gtcatgcgca | 300 |
| gggggtttata | aatcaattt | ttcgatccg | agcgcgggcg | tgtatcattc | ttatatccca | 360 |
| agcggttctaa | aaagctatgg | gcataatgat | agcccctttt | tgcgtaattgt | gatgggggaa | 420 |
| ttgctcatta | aagacgatgc | gtttgcttct | gaagtggctt | taaaagagtt | gctctattgg | 480 |
| aaaacacgct | accatgacaa | tttaaaagac | atgattaaat | cttacaacaa | gggcagtcgt | 540 |
| tgggaaagga | gcgaaaaatc | taacgctgat | gctgaaaaat | attacgaaga | gatacaagac | 600 |
| agaatcaggc | gtttgaaaga | atctaaaatc | tttgattcgc | agtcctagta | tgaccaagaa | 660 |
| ttgcaaaaaa | gcgctaatag | caacctggat | ttagacccta | tgggcaacgc | catgccccaa | 720 |
| gccttaattg | ccaaagaaac | taaaatagaa | gaaaccacaag | cagaaaaatc | ccaagaaatg | 780 |
| aaagagacaa | ctagcgagca | aacaaaaagt | aagccagaaa | aagcaaaaga | taaacccatg | 840 |
| tatttggcgc | aaatcaacag | cactgatttc | acaccggtta | aaaaaagccc | caaaaaaccg | 900 |
| gctaaagtga | gccaaaaaca | ctcctttaag | aataacatta | aaaataatgt | aaaaaaccaac | 960 |
| gccaaaaccg | cttccaaaaa | acaagaaatg | tgcaaaaatt | gctctccagg | gcaaaggaat | 1020 |
| gcgatttttag | ctaaccacat | cactctcatg | caagagctt | | | 1059 |

Seq ID 88

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgattgaat | ggatgcaaaa | tcatagaaaa | tatttagtgg | ttacaatatg | gataagcacg | 60 |
| atcgctttta | ttgccgctgg | gatgataggc | tgggggcaat | acagcttttc | tttagatagc | 120 |
| gatagcgctg | ccaaagtggg | acagattaag | atttctcaag | aagaattagc | ccaagaatac | 180 |
| cgccgcctta | aagacgcata | tgctgagtct | atccctgatt | ttaaagaact | caccaagat | 240 |
| caaatcaaag | ccatgcattt | agaaaaaagc | gctttagatt | cgctcatcaa | tcaagcctta | 300 |
| ttgagaaatc | tgcgctttaga | tttagggctt | ggcgctacaa | agcaagaagt | ggcgaaagag | 360 |
| atcagaaaaa | cgagcgtttt | ccaaaaagat | ggcgtttttg | atgaagaatt | gtataaaaaat | 420 |
| atcttaaagc | aaagccatta | ccgccccaaa | cattttgaag | aaagcgttga | aaggctttta | 480 |
| atccttcaaa | aatcagcac | tctattcccc | aaaaccacta | cccctttgga | gcaatccagc | 540 |
| ctatcgcttt | gggcaaaatt | gcaagacaaa | ttagacattc | ttatcctaaa | ccctagtgt | 600 |
| gttaaaatct | ctcttaatga | agaagagatg | aaaaaatatt | acgagtccca | taaaaaggat | 660 |
| tttaaaaaagc | ccacgagctt | taaaaacacgc | tctttatatt | ttgacgctag | tttggaaaaa | 720 |
| cctgattttga | aggagtttga | ggaatactac | cataaaaaaca | aggtgtctta | tttggacaaa | 780 |
| gaggggaaat | tgcaggattt | taaaagcggt | caagagcaag | tcaagcatga | tttaagcatg | 840 |
| caaaaagcga | atgaaaaagc | cttaaggagc | tatatcgctc | taaaaaaaagc | gaacgcgcaa | 900 |
| aactacacca | cacaagattt | tgaagagaac | atactccctc | atactgctga | aactcacgcaa | 960 |
| aaactcacgc | ctctcaaacc | ccttgaaatc | ctaaagccag | agccttttaa | agatgggttt | 1020 |
| attgtgtgtgc | aactcatctc | tcaaattaaa | gacgaattgc | aaaattttta | tgaagctaaa | 1080 |
| agcgctctta | aaacccgcct | aactcaagaa | aaaaccctta | tggcggttgca | aacttttagcc | 1140 |
| aaagaaaagc | ttaaggattt | taagggcaaa | agcggtgggt | atgtaagccc | taatttttga | 1200 |
| ggcactatta | gtgagcttaa | ccaagaaagaa | agtgctaaat | ttatcaacgc | tctttttaac | 1260 |
| cgccaggaaa | aaaaggggtt | tatcgctatt | aataataaag | tgggtgctcta | tcaaatcaca | 1320 |
| gaacaaaatt | tcaaccactc | atttagtgca | gaagaaagcc | agtatatgca | gcgttttagtc | 1380 |
| aataacacta | aaacggattt | ttttgataaa | gcgttgatag | aagaattgaa | aaaacgctat | 1440 |
| aagatagtca | aatacattca | a | | | | 1461 |

Seq ID 89

| | | | | | | |
|------------|-------------|------------|-------------|------------|-------------|------|
| gtgtcccctc | taaagacgat | acggatctat | tcttaccacg | attctattaa | ggactctatt | 60 |
| aaggcggttg | tgaatatctc | cactgaaaag | aagattaaaa | acaattttat | aggtggcggt | 120 |
| gtgttttaag | accctttttt | ccaacaattt | tttgggatt | tgggtggcat | gattcctaaa | 180 |
| gaaagaatgg | aaagggtctt | aggcagcggc | gtaaatcattt | ctaaagacgg | ctatatgtga | 240 |
| actaataacc | atgtgattga | tggcgcggt | aagattaaag | ttaccattcc | agggagcaat | 300 |
| aaagaatatt | ccgccactct | agtaggcacc | gattctgaaa | gcgatttagc | ggtgattcgc | 360 |
| atcactaaag | acaatctgcc | cacgatcaaa | ttctctgatt | ctaattgat | ttcagtgggc | 420 |
| gatttgggtt | ttgcgattgg | taaccctttt | ggcggtggcg | aaagcggtac | gcaaggcatt | 480 |
| gtttcagcgc | tcaataaaaag | cgggattggg | atcaacagct | atgagaattt | cattcaaaaa | 540 |
| gacgcttcca | tcaatcctgg | aaattccggc | ggcgctttta | ttgatagccg | tggaggggtta | 600 |
| gtggggatta | ataccgctat | tatctctaaa | actgggggca | accacggcat | tggctttgcc | 660 |
| atcccttcta | acatgggttaa | agatactgta | acccaactca | tcaaaaccgg | taagattgaa | 720 |
| agaggttact | tgggctgtgg | cttgcaagat | ttagtggtgc | atttgcaaaa | ttcttatgac | 780 |
| aacaagaag | cattagcgta | gaaaaagact | ctccggctaa | aaaagcagg | aaaagcagg | 840 |
| attttgggtg | gggatttgat | caccgaagtc | aatgggaaaa | aggttaaaaa | cacgaatgag | 900 |
| ttaagaaatc | taatcggctc | catgctaccc | aatcaaaag | taaccttaaa | agtcattaga | 960 |
| gacaaaaaag | aacgcgcttt | caccctcact | ctagctgaaa | ggaaaaaccc | taacaaaaaa | 1020 |
| gaaacatttt | ctgctcaaaa | cggcgcgcaa | ggccaattga | acgggcttca | agtagaagat | 1080 |
| ttaactcaag | aaaccaaaaag | gtctatcgct | ttgacgcatg | atgttcaagg | gggttttagtc | 1140 |
| tctcaagtga | atgaaaattc | cccagcagag | caagccggat | ttaggcaagg | taacattatc | 1200 |
| acaaaaattg | aagaggttga | agttaaaagc | gttgcggatt | ttaaccatgc | tttagaaaa | 1260 |

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|------|
| tataaaggca | aacccaaacg | attcttagtt | ttagacttga | atcaagggtta | taggatcatt | 1320 |
| ttggtgaaa | | | | | | 1329 |

Seq ID 90

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|-----|
| atgagtaaga | gtttatacca | aactttaaat | gtgagcgaaa | acgccagcca | agatgaaatc | 60 |
| aaaaaatcct | accgccgttt | agcccagaaa | taccacccgg | atttgaataa | aaccaaagaa | 120 |
| gccgaagaga | aattcaaaga | aatcaacgcc | gcttatgaaa | ttttgagcga | tgaagaaaaa | 180 |
| cgccgccaat | acgatcagtt | tggcgataac | atgtttggcg | ggcagaattt | cagcgatttt | 240 |
| gccagaagcc | gtggtcctag | tgaagattta | gacgatattt | taagctctat | ttttgggaaa | 300 |
| ggaggctttt | cgcaaagatt | ttctcaaaac | tcgcaaggct | tttctggctt | taatttttcc | 360 |
| aatttcgccc | ctgaaaattt | agacataacc | gccgctttta | atgtctctgt | tttagacacc | 420 |
| cttttaggca | ataaaaaaca | agtgagcatc | aataatgaga | cttttagcct | taaaatccct | 480 |
| attggcgtgg | aagagggcga | aaagattagg | gttcgcaaca | aggggaaaac | ggggcgaaacg | 540 |
| actaggggcg | atttgctcct | agagatccat | attgaagaag | atgaaatgta | taggcgcgag | 600 |
| aaagatgata | ttacccaaat | ctttgattta | cccttaaaaa | cggctctttt | tggagggaaa | 660 |
| attgaaatcg | ctacttggca | taaaacctta | accctaacca | ttccccctaa | caccaaagcg | 720 |
| atgcaaaaat | tccgcattaa | agaaaaaggg | atcaaaaaca | gaaaaacttc | gcatgtgggg | 780 |
| gatttgtatt | tgcaggctcg | tttgattttg | cctaaaactg | aaacgcttcc | taatgagttg | 840 |
| aaagcggtat | tagaaaaaga | attg | | | | 864 |

Seq ID 91

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| atgaaacaaa | caaccattaa | ccactctgtg | gaattagtag | ggataggctt | gcacaagggc | 60 |
| gttcctgtga | agcttgtttt | agagccttta | ggggaaaatc | aaggcattgt | ttttaccgc | 120 |
| tctgatttgg | gcgtgaatct | ccccttaaaa | cctgaaaaca | tcgtggatac | caaaatggca | 180 |
| accgttgg | gtaaggataa | tgctaggatt | ttctagattg | agcatttgc | ttcagctgtc | 240 |
| catgcgtatg | gcattgacaa | tcttaagatc | tctgtggata | acgaagaaat | ccctatcatg | 300 |
| gatgggagtg | ctttgactta | ttgcatgctt | ttagatgaag | cagggattaa | agaactagac | 360 |
| gctcctaaaa | aggtgatgga | aatcaagcaa | gccgttgaga | ttagagagag | cgataagttt | 420 |
| gttaaaattg | agccagacag | ccagctttct | ttgaatttca | cgattgattt | taaccatccg | 480 |
| gttatcgcta | agcaagccca | tcattttgtc | tttagtaaaa | ccgcttacaa | agagcaagtc | 540 |
| gctaaagctc | gcacctttgg | gtttttgcaa | gaagtgaatt | acttgcatc | cattggtttg | 600 |
| gcgaaaggag | ggagtttgaa | taattgcac | gtgctggatg | aaaacagcat | tttgaataaa | 660 |
| gagggcttga | ggtgcgaaaa | ggagtgtgtg | tgccataaga | tttttagacgc | tatgggggat | 720 |
| ctaattggtt | taggcatgcc | tgtgatgggc | aaatacactt | ctttttcagg | gagtcataag | 780 |
| ctcaattcca | tgttggttaa | agccattttg | gcggacgcta | aaaattacga | agttttgatc | 840 |
| gctgcagatc | cggctaaaga | atttgcgttg | caaaaggctt | tcgct | | 885 |

Seq ID 92

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| gtgcaaccga | tgaatcttaa | aaaactttat | ttggctttta | tcataggggg | tttattagcg | 60 |
| tttttaaccc | tatcttcacg | gctgggtaat | agcgttttag | tggggcgctt | tgggggtgtg | 120 |
| tttgccgcac | tcaataaaaa | atattttggg | catctttcat | tcattaattt | accctattta | 180 |
| gcatgggttt | tattcctttt | atacaagact | aaaaaccctt | ttacagaaat | cgtttttagaa | 240 |
| aaaactttag | ggcatctatt | aggcatttta | tctttgctct | ttttacaatc | tagcctatta | 300 |
| aatcaagggg | aaatcgga | cagcgcgctg | ttgtttttac | gcccttttat | aggggatttt | 360 |
| gggcttttat | cgctgataac | gcttatggta | gttatttctt | atttgattct | attcaaaacta | 420 |
| ccccctaaaa | gcgtttttta | tccttatatg | aacaaaacac | aaaacctttt | aaaagagatt | 480 |
| tacaaacaat | gcttacaagc | ctttagccct | aatttttagcc | caaaaaaaga | gggttttgaa | 540 |
| aacaccccat | cagatattca | aaaaaaagaa | accaaaaacg | acaaagaaaa | agaaaaccgc | 600 |
| aaagaaaacc | ctattaatga | aaaccacaaa | accctaaacg | aagaaccgtt | tttagcgatc | 660 |
| ctacccctct | ataacacgac | tttaaatgat | tcagagccgc | aagaaggctt | agtccaaatt | 720 |
| tctcccacc | cccctaccca | ttacaccatt | taccctaaaa | gaaaccgatt | tgatgatttg | 780 |
| actaacccca | ctaaccctcc | tttaaaagaa | attaacaag | aaactaaaga | aagagaaccc | 840 |
| acgcctacaa | aagaaactct | tacgcccacc | acgcccacac | ctatcatgcc | cacacttgca | 900 |
| cccataatag | aaaatgacaa | caaaacagaa | aaccaaataa | cccccaacca | ccctaaaaaa | 960 |
| gaagaaaacc | cacaagaaaa | cacgcaagaa | gaaatgatag | aaggaaggat | agaagaaatg | 1020 |
| ataaaggaaa | atctaaaaaa | agaagaaaaa | gaagtgcata | acgctccaaa | ctttagccca | 1080 |
| gtaaccccca | caagcgctaa | aaaaccgctt | atggttaaag | aattgagcga | aaataaagag | 1140 |
| atattagacg | gattggatta | tggcgaggtg | caaaaaccca | aagattatga | gcttcccacc | 1200 |
| acgcaattat | tgaatgggtt | ttgtttgaaa | gacacttctt | tagacgaaaa | cgagattgac | 1260 |
| caaaaaatcc | aggatctatt | gagcaaacctg | cgcaccttta | aaattgatgg | cgatattatc | 1320 |
| cgcaacttatt | cagggcctat | tgtaacctat | tttgaattcc | gcccagcccc | taacgttaag | 1380 |
| gtgagtcgta | ttttaggctt | gagcgatgat | ttagcgatga | ctttatgcgc | tgaatccatc | 1440 |
| cgcatccaag | ccctatttaa | gggtaaagat | gtcgttgcca | ttgaaatccc | taacagccaa | 1500 |
| ccccaattta | tttattttaag | agaaattcta | gagagcgaat | tgtttcaaaa | atccagctcg | 1560 |
| cccttaactc | tagctttagg | caaagacatt | gtgggttaacc | ctttcatcac | ggatttaaaa | 1620 |
| aagotcccc | atttgcctcat | cgctggcacg | acaggaagcg | gtaagagcgt | gggcgtgaat | 1680 |
| gcgatgattt | tatccttact | ttataaaaac | cctcccgatc | aactcaaatt | agtgatgatc | 1740 |
| gatcccaaaa | tggtagaatt | tagtatttat | gcggatatcc | ctcatttgct | cacgcccatt | 1800 |

| | | | | | | |
|-------------|------------|------------|-------------|-------------|-------------|------|
| atcaccgacc | ctaaaaaagc | tattggggct | ttgcaaagcg | tggtctaaaga | aatggaacgc | 1860 |
| cggtattctt | taatgagcga | atacaagggt | aaaaccattg | attctttataa | tgaacaagcc | 1920 |
| ccaagtaacg | gcgttgaagc | gttcccttat | ttgattgtgg | tgattgatga | attagcggat | 1980 |
| ttaatgatga | cagggggcaa | agaagcggag | tttccctatcg | ctagaatcgc | tcaaattgggg | 2040 |
| cgcgcgagcg | gcttacacct | cattgtagcg | acccaacgcc | caagcgtgga | tgctcgtaacc | 2100 |
| ggcttgatta | aaaccaactt | gccttcaagg | gtgagtttta | gggtaggcac | taagattgat | 2160 |
| tctaaagtga | ttttagacac | tgatggggcg | caaagcttgt | taggaagagg | cgatatgctc | 2220 |
| tttaccctccc | caggagcgaa | cgggttagtg | cgcttgcatg | ccccctttgc | cactgaagat | 2280 |
| gaaatcaaaa | aaatcgtgga | ttttatttaa | gccccaaaag | aagtacaata | cgataaagat | 2340 |
| ttcttgctag | aagaatcacg | catgccttta | gacaccctta | attatcaagg | cgatgacatt | 2400 |
| ttagaaaggg | ctaaagcggg | gattttagaa | aaaaagatca | cttctacgag | ttttttacaa | 2460 |
| cgccaatttaa | aaatcggcta | caaccaagcc | gctaccatta | ctgacgaatt | agaagctcaa | 2520 |
| ggctttttat | ccccaaagaa | cgctaaaggc | aacagagaga | ttttgcaaaa | cttt | 2574 |

Seq ID 93

| | | | | | | |
|-------------|------------|------------|-------------|------------|------------|-----|
| atgttagaaa | atgtcaaaaa | gtcctttttt | agggttttgt | gcttgggtgc | gttgtgttta | 60 |
| ggggggctaa | tggcagagca | agaccctaaa | gagcttgtgg | gtttgggggc | aaagagctac | 120 |
| aaagagaaag | atttcactca | agcgaagaaa | tattttgaga | aagcgtgcga | tttgaaagaa | 180 |
| aatagcgggt | gttttaattt | aggggtgctt | tattatcaag | ggcaaggggt | ggaaaagaac | 240 |
| ttgaaaaaag | cgcctcctt | ttacgctaaa | gcttgcgatt | tgaattacag | caatgggtgt | 300 |
| catttgctag | ggaatttata | ttacagcggg | caaggcgtgt | cccaaaacac | caataaagcc | 360 |
| ctacaatact | actctaaagc | gtgcgatttg | aaatacgcgt | aaggggtgcg | gagcttaggg | 420 |
| gggattttatc | atgatggtaa | agtggtaact | agggatttta | aaaaagcgg | ggaatatttc | 480 |
| actaaagcgt | gcgattttaa | cgatggcgat | ggttgcacga | tattagggag | cttgatgat | 540 |
| gcaggcagag | gtacgcctaa | agatttgaaa | aagggcgctg | cttcgtatga | taaagcttgc | 600 |
| gacttaaaag | agcaccagag | gtgctttaac | gcaggggaata | tgtatcatca | tggcgaaggt | 660 |
| gcaacgaaga | attttaaaga | ggctctcgct | cgttattcta | aagcatgcga | attggaaaat | 720 |
| ggcggaggggt | gtttcaattt | aggggctatg | caatacaatg | gcgaaggcgt | aacaaggaat | 780 |
| gaaaagcaag | ccatagaaaa | ctttaaaaaa | ggctgtaaat | tgggcgctaa | aggggcgtgc | 840 |
| gatattctca | agcagcttaa | gatcaaagtt | | | | 870 |

Seq ID 94

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| gtgaagttac | ccaaagcctt | aaacgaagcc | accgcaggag | cggccttaaa | atatcacatt | 60 |
| aaaagagcgc | ttgagagaag | ccactcaata | agcgatttta | gtaagaattt | agaactaagc | 120 |
| acacaaaaat | cccactttag | caacaacacg | cttaaaatca | ttgaagagct | taacaacggc | 180 |
| gtcaaaacag | cgagcgaaga | aatcaaaaga | aaagcgcgcg | atttttctaa | tcaaaaactc | 240 |
| actaacgagc | aatcaaaaga | tctattaaat | aacgcagaaa | tccctacaag | cgggagagac | 300 |
| gctatcactt | ttggagtga | taacctaaac | cctgagattg | ttgaattcct | gcacaaaaac | 360 |
| aacaagaaaa | tgattataga | aaaagcctct | aacaaagaat | tagaactttt | aaaagacgct | 420 |
| aacttttaaac | accctgaaaa | cataagggcg | agttttagatc | atgatgctat | cgctcacata | 480 |
| ctcaaaaggc | atggcgttaa | ttctgttaat | gttagaaatg | gtgagatccc | tattacgaac | 540 |
| gaagatattg | ctaattatag | atatatcggt | aataacgcgt | atgcaattct | taggacttta | 600 |
| gacaacgaga | ataaagaact | tataagcgcg | tttaaacaaa | tcaacggcta | tgccggtagtc | 660 |
| gtggagcaag | cgatcaataa | gaaaaatgaa | ttagttttga | aaacgatgta | taagagttaa | 720 |
| ggagattata | aggataataa | cgcttataag | agtttttcaa | gcacccatac | actcaatgct | 780 |
| gatgcaaagg | tgaaccatag | gttgagttcc | tatagcggtg | ctacagagaa | tactactcaa | 840 |
| aaagatttaa | tagatcaaga | gaattttatta | aaaacaagcg | aaaattttaa | cgaaagcaca | 900 |
| ccaaaaccta | ccaacttaag | cccgcctaga | caagccaacg | ctgaaaagtt | agcgaagtta | 960 |
| gaaagcgaga | agctagaaa | cgaaaaagag | tttttgaaag | ctaagagcga | agaagccaca | 1020 |
| cgcaaaagccg | cattaaaaaa | gaaattagaa | cacgagcag | gcaatgcggg | caacattgaa | 1080 |
| agccagacta | aaatagaagt | aggagaggat | ataccacac | aaacacaagc | gcaattaccc | 1140 |
| aaaagccgag | tgaggctaaa | cgaacgagag | atttacgatc | tagactatgc | gatcgtcaaa | 1200 |
| gcgaaagatt | taaaaccaag | ctttaccaca | ggcgggacgc | aaaagagaac | ggacatgaac | 1260 |
| gaagagcaga | ttaaaagcat | tgctgaaaat | tttgatccta | aaaagatatt | tggtagcggg | 1320 |
| gggtttgaa | attttaccgat | cattctacat | gacgggcaag | tgatcgagag | aaaccacaga | 1380 |
| atccaaggca | tgctaaactt | cacgcctaaa | agcggttttt | cttacgagag | agcgatcaag | 1440 |
| gaatactatc | acatagactt | aaaaccggac | gagttgttag | tgagagtgcc | acacaagcgc | 1500 |
| ctaaacaaca | ccgagatcaa | caatttagcg | gcttcatcca | atcaaggacg | cttcaatagc | 1560 |
| gaaagcgatc | acgctatagc | ggttttaagc | cactatgaag | ccaagttaaa | agaattagac | 1620 |
| caaaaattag | acgctgatag | caatctactca | ttggttgctaa | aaatttgaa | aaatttgaa | 1680 |
| tttgataagg | ctacgcaccc | taatgtaacc | gatagtaatt | tagcgttgct | gatgtttaac | 1740 |
| atgccacgaa | ccaaaacgca | agggatagaa | ttactcaacc | gctggaaaaa | agaattttcc | 1800 |
| aacgacatta | aaagctatga | aaaagtaaaa | aaaatgtttg | tagataacgc | gggcagtttt | 1860 |
| cacaatctca | tccacgatct | gaacttccct | aaggtgagtt | taaacgctta | tttaagcgat | 1920 |
| attatggatc | gcaagttttg | gaattttaa | aattaccaaa | gcacgagcga | gagcctgaaa | 1980 |
| gatttgagcg | gaaaatttcta | taaaacagag | tcgttagaga | tggttgaaaa | gagcgatcaa | 2040 |
| agcacgagcg | atatttagcga | gatttttagga | ggagcgatcg | cacgattttgc | acgattttgat | 2100 |
| gatccgagca | aagcgttatt | tgaagcctta | agaagcgata | acattaaaaa | aggccttgaaa | 2160 |

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|------------|------|
| gattacaaga | tcgcagatgt | tactaaggac | atgtttaacg | ctgatatgtaa | agagttaaag | 2220 |
| gacattgata | tttacgattt | cacgcattac | cttttaaatg | taaatagaga | gccgaatgaa | 2280 |
| aataacccta | tcttaaagcg | cttgatagaa | gccgtgaaag | acatgcaaaa | agaaagcgag | 2340 |
| aaaggaataa | aacaaaaact | tgaacgcctt | agcgaatggg | gacacaatta | tagcgagttt | 2400 |
| aaaggtgatg | gttttaggagc | gattaacaag | ttattagaaa | ctaaaaaagg | ttttgtagcg | 2460 |
| ggagcgtttc | ataaggaagg | tttaggggat | attgatattg | tttatggaaa | ctctaaatac | 2520 |
| ggactagaac | atatatttta | tcgtagggaa | agcgaatgca | tagacaaagg | catgagttaa | 2580 |
| gaagaagcta | aaaaatacgc | attaaaaata | attaacaata | tccctaacat | aataagcaat | 2640 |
| ggaaaactat | caaaagataa | tttagggcgt | ttaagtattg | agtttgaaaa | tcaaagagtg | 2700 |
| ggtttgaaatg | atagttggaa | aggtgagact | ttaataataa | ggtgggttat | tacaagttat | 2760 |
| gaaatagata | aatacaaggaa | tgggctaatt | gagtcgcctt | tagcaccaaa | ttacaagggg | 2820 |
| aaagatacta | atccccctaaa | ccttgatagc | cctaataccta | ccacaaaaaa | t | 2871 |

Seq ID 95

| | | | | | | |
|-------------|-------------|------------|-------------|------------|-------------|-----|
| atgggatacg | caagcaaatt | agccttgaag | atttgtttgg | caagtttatg | tttatattagc | 60 |
| gctcttgggtg | cagaacacct | tgaacaaaaa | aggaactata | tttataaagg | ggaggaagcc | 120 |
| tataataata | aggaatatga | gcgggcggct | tctttttata | agagcgcgat | taaaaatggc | 180 |
| gagccgcttg | cttatgttct | tttagggatc | atgtatgaaa | atggtagggg | tgtgcctaaa | 240 |
| gatgaaaaga | aagcggctga | atattttcaa | aaagcggttg | ataacgatat | acctagaggg | 300 |
| tataacaatt | taggcgtgat | gtataaagag | ggtagagggtg | tgcctaaaga | tgaagaagaa | 360 |
| gccgtggagt | atttttagaat | agctaccgag | aagggtctata | ctaacgccta | tataaactta | 420 |
| ggcatcatgt | atatggaggg | taggggaggt | ccaagcaact | atgtgaaagc | gacagagtgc | 480 |
| tttagaaaag | cgatgcataa | gggtaatgta | gaagcttata | tccttttagg | ggatatttat | 540 |
| tatagtggga | atgatcaatt | gggtattgag | ccagacaaag | ataaggcgat | tgtctattat | 600 |
| aaaatggcgg | ctgatatgag | ctcttctaga | gcttatgaag | ggttagcaga | gtcttatcag | 660 |
| tatgggttag | gcgtggaaaa | agataagaaa | aaggctgaag | aatacatgca | aaaagcatgc | 720 |
| gattttgaca | ttgataaaaa | ttgtaagaaa | aagaacactt | caagccga | | 768 |

Seq ID 96

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|------|
| atgggcggaa | tcttatcttc | actcaacact | tcttacaccg | gccttcaagc | ccatcagagc | 60 |
| atgggtggatg | ttaccgggaa | taatatctct | aacgctagcg | atgaatttta | tagccgccag | 120 |
| cgcggtgattg | caaagcccca | agcggcctat | atgtatggca | ctaaaaacgt | gaatatgggc | 180 |
| gtggatgtgg | aagccattga | aagggtgcac | gatgagtttg | tttttgctcg | ttacacgaaa | 240 |
| gctaattacg | aaaacactta | ttacgatata | gaattttcgc | atttaaaaga | agcgagcgcg | 300 |
| tattttccgg | ataagcgata | agcgaagcct | gtcagagatt | tgcgaagatta | ttttaattca | 360 |
| tggaaagaat | tgtctaaaaa | cgccaaagac | tccgctcaaa | aacaggctct | cgctcaaaaa | 420 |
| acagaagcctt | taacgcacaa | cattaaagac | accagagaga | ggttaacgac | cttacagcac | 480 |
| aaggcgagtg | aagaattaaa | aagcgtcatt | aaagaagtca | atagcttggg | ttctcaaatc | 540 |
| gctgagatta | acaaacgcata | taaagaagtg | gaaaacaaca | agagttaaag | gcatgcgaac | 600 |
| gtaacacatga | ataagcgaga | tgaattggaa | ttccatttgc | gagagctttt | aggggggaat | 660 |
| gttttttaaaa | gcagcattaa | gactcattcg | ctcaccgata | aagactcagc | ggattttgat | 720 |
| gagagctata | accttaatat | cgggcatggg | ttcaatatca | ttgatggctc | tattttccat | 780 |
| cctttagtgg | ttaaagaatc | cgaaaataaa | gggggtttga | accaggttta | ttttcaaagc | 840 |
| gatgaattta | aggttactaa | tattactgac | aactcaatc | aggggaagag | gggggcgtta | 900 |
| ttgaatgtgt | ataatgacgg | ctctaacggg | actttaaagg | gcaaattaca | agattattat | 960 |
| gatttgtttg | attcttttgc | taagggtttg | atagaatcca | ctaattcgat | ttacgctcaa | 1020 |
| agcgcgagtc | atttatattga | gggcgagccg | gtggagttta | atagcgatga | agcctttaaa | 1080 |
| gacactaact | acaatatcaa | aaacggctcg | tttgacttaa | tcgcttacaa | caccgatggt | 1140 |
| aaagaaatcg | ctagaaaaac | cattgctatc | acgcccatta | caaccatgaa | cgatattatc | 1200 |
| caagccatta | acgctaacac | tgatgacaat | caggacaata | acaccgaaaa | cgattttgat | 1260 |
| gattattttca | cagcgggctt | taacaatgag | actaaaaagt | ttgttatcca | gcctaaaaac | 1320 |
| gcttcgcaag | ggttgtttgt | ctctatgaaa | gataacggca | cgaattttat | gggagcggtta | 1380 |
| aaactcaacc | cttttttttca | aggcgatgac | gcttctaata | tcagcttgaa | taagggaatac | 1440 |
| aaaaaagagc | ctaccactat | ccgcccatgg | cttgctccca | ttaatgggaa | ttttgatgtg | 1500 |
| gcgaacatga | tgcgaacatt | gcaatacgtat | agcgtggatt | tttataacga | taagtttgac | 1560 |
| attaaaccaa | tgaaaatcag | cgagttttat | caatttttaa | ccggtaaaat | caacacggac | 1620 |
| gctgaaaaat | ccgggcgtat | tttgacact | aaaaagagca | tgttagaaac | cattaaaaaa | 1680 |
| gagcaactct | ctatttcgca | agtgaagcgtg | gatgaagaaa | tgggtgaattt | gatcaagttt | 1740 |
| caaagcggct | atgcggctaa | cgctaaagtc | attaccgcta | ttgatcggtat | gatagacact | 1800 |
| ttattgggga | ttaaacaa | | | | | 1818 |

Seq ID 97

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|-----|
| atgaggtatt | tatggctttt | tttaatacac | actatagggc | tttttgcaac | agataaaaca | 60 |
| ctagatatta | ttaaaaccat | tcaaaaactt | cctaagattg | aagtgcgcta | ctctatagat | 120 |
| aacgatgccca | attacgcttt | aaaattgcat | gaagtcttgg | cgaatgattt | aaagactagc | 180 |
| cagcattttg | atgtttctca | aaacaaggat | caaggtgcta | tcaattacgc | agaactcaag | 240 |
| gataaaaaag | tccatctcgt | agcgttctgt | agcgtggcgg | tagaaaaagg | caataaaatt | 300 |
| tcacgattaa | aacttttatga | tgtggatata | ggaacgctca | aaaagacttt | tgactaccct | 360 |

| | | | | | | |
|------------|------------|------------|------------|------------|-------------|------|
| attgtaagtt | tagatctata | cccttttgca | gcgcaaca | tggctattgt | ggtgaatgac | 420 |
| tatttaaaag | cccttctat | cgcttggatg | aagcgcctta | ttgttttttc | taaatacatt | 480 |
| ggaccaggaa | tcacaaatat | cgcactagcg | gattatacga | tgcgttatca | aaaagaaatc | 540 |
| atcaaaaaca | ataggtcaa | tatcttcct | aaatgggcga | acgctgagca | aacggagttt | 600 |
| tattcacgcg | agtatggcga | aagaacgcc | atgattttta | aatacaacat | tcaaaaagcc | 660 |
| actcatgaga | atatcgctag | ctctcaagga | atggctgtgg | tctctagcgt | gagttctgat | 720 |
| ggctctaaaa | ttttaatgtc | tttagccct | gatggccaac | cggatgtgta | tttztatgac | 780 |
| acgcataaaa | aaactaaaac | taaaataacg | cgctatccgg | ggatagatgt | ctcaggagtg | 840 |
| tttttagaag | atgacaagtc | tatggccttt | gtttcggata | gatccggtta | tcctaaccatc | 900 |
| tacatgaaga | aattgggggt | aaaagagagc | gcggagcaac | tcctttatga | agggagaagc | 960 |
| aatgaatcca | ttgacgctta | taaagatagt | attgtgtatg | tgagccggga | aaaccttaat | 1020 |
| gaatttgga | aaacgggtgt | taatttgaat | ttgatcacct | taaatagcaa | atatatccgc | 1080 |
| aggcttaccg | tgaatggctc | taaccagatg | cctcggtttt | ctacggatgg | gagaaatatc | 1140 |
| atgtatatca | aaaagacacc | ccaagaatac | gccatggggc | ttattttgct | agattataat | 1200 |
| cagagttttt | tattcccttt | aaagaatgtg | aaaatacaag | cctttgattg | g | 1251 |

Seq ID 98

| | | | | | | |
|------------|------------|-------------|-------------|------------|-------------|------|
| atgtttcaag | cgtaagcga | tgggtttaaa | aacgcgctca | ataaaatccg | ctttcaagat | 60 |
| gatgaaaaag | cgctagacag | agcggttagat | gaattgaaaa | aaacgctctt | aaaaaacgat | 120 |
| gtgcatcata | aagtggctag | agaattgtct | aaaaaagtgg | aaagtcaaac | taaacttaat | 180 |
| ggcattggta | agcagcaatt | tttagacgct | ttagaaaaga | gtttgttaga | aattttaagc | 240 |
| gctaaaggga | gcagtggttt | cactttcgct | caaacgcccc | caactgtggt | tttaatggcc | 300 |
| ggtttgcaag | ggagcggtaa | gacaaccacc | accgctaaac | tcgctcatta | tttaaaaacc | 360 |
| aaaaataaaa | aagtgccttt | atgcgcgatgc | gatttgcaac | gcctagcggc | agtggagcaa | 420 |
| ttaaaggttt | tgggcgaaca | ggtgggcgtg | gaagtttttt | atgaagaaaa | taaaagcggtg | 480 |
| aaagaaatcg | ctagcaacgc | tttaaaaagg | gctaaagaag | cgcaatttga | tgttttgcctc | 540 |
| gtggatagcg | cggggcgttt | agccattgat | aaagagctta | tgcaagaatt | aaaagaagtt | 600 |
| aaagaaatct | taaaccccca | tgaagtgtctg | tatgtcgag | acgcattgag | cgggcaagat | 660 |
| ggcgtcaaaa | gcgcgaacac | ctttaatgaa | gaaataggcg | tgagtgggt | ggtgttaagc | 720 |
| aaatttgata | gcgattctaa | aggggggtatc | gccttaggca | tcacttacca | attaggctta | 780 |
| cccttgcgtt | ttattgggag | cggggaaaaa | atccctgatt | tagacgtgtt | tgtgcctgaa | 840 |
| agaattgtgg | ggcggttgat | gggggctgga | gatattgtct | cgctcgctga | aaaaaccgct | 900 |
| agcgttttaa | accctaata | agccaaagat | ttaagcaaaa | aactcaaaaa | agggcaattc | 960 |
| actttcaatg | actttttaaa | ccagattgaa | aaagtgaaaa | aattaggctc | tatgagttct | 1020 |
| ctaactctta | tgattccagg | tttagggaat | atggcaagcg | cgtaaaaaga | cacggattta | 1080 |
| gaaagctctt | tagaagtga | aaaaatcaag | gctatgggtca | attccatgac | caaaaaagag | 1140 |
| caagaaaacc | ccgagatttt | aaacggcagc | cgaagaaaaa | ggatcgcttt | agggagcggt | 1200 |
| ttagaagtgt | ctgaaatcaa | tcgcatcatc | aaacgctttg | atcaagcgag | caaaatggcg | 1260 |
| aaacgcttaa | ccaataaaaa | gggtattagc | gatttgatga | atctaagtag | tcaggctaaa | 1320 |
| aatcaaacgc | cccctaaaat | gcgc | | | | 1344 |

Seq ID 99

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgataatga | aacaagaacc | caccacctac | caaccagaag | agatagaaaa | aaagatttat | 60 |
| gaaatttgct | ctcatagggg | gtattttgaa | attgatggca | atgaagcgat | ccaagaaaaa | 120 |
| aacaaacgat | tttgcttgat | gatgccccct | cctaattgta | ccggtgtgtt | gcacataggg | 180 |
| caacccctga | ctttaagctt | gcaagatatt | ttagcgcgtt | acaaacgcatt | ggatgggtat | 240 |
| aagactttgt | atcagcccg | gttgatcac | gctggcattg | caacgcaaaa | tgtcgtggaa | 300 |
| aagcagcttt | taagtcaagg | gattaaaaaa | gaagatttag | ggcgtgaaga | gttcattaaa | 360 |
| aaagtgtggg | aatggaaaga | aaagagcggg | ggagcgattt | tagagcaaat | gaagcgttta | 420 |
| ggcgtgagcg | cggccttttc | taggactcgt | ttcacgatgg | ataaggcctt | gcaaagagcg | 480 |
| gtcaaattgg | cgtttttgaa | atgggtatgaa | aaaggtctca | ttattcaaga | taattacatg | 540 |
| gtgaatttgt | gcactaaaga | tggggcggtg | agcgatattg | aagtggagta | tgaagagcgt | 600 |
| aagggggcgt | tgtattatat | tagatattat | ttagaaaaatc | aaaaagatta | tttagtggtg | 660 |
| gctaccacac | gcctgaaac | cttgtttggc | gatagcgcg | ttatgggtcaa | tcctaaccgat | 720 |
| gagagataca | agcattttgt | ggggcaaaaa | gcgatcttgc | ctttaatcca | tcgcacaatc | 780 |
| cctattatcg | ctgatgaaca | tgttgaaatg | gagtttgca | cagggtgtgt | gaaagtaacc | 840 |
| cctgggcgatg | atttttaacga | ttatgaagtg | ggcaaacgcc | accattttgga | aacgattaaa | 900 |
| atctttgatg | aaaaggggat | tttaaacgcg | cattgcgggg | agtttgaaaa | tttagaacga | 960 |
| ttagaagcta | gagataaggt | cgtagaaaga | ttaaaagaaa | acgccctatt | ggaaaaata | 1020 |
| gtgatacaca | cgcataaggt | ggggcattgc | tatcggtgtc | ataatgtggt | agaaccttat | 1080 |
| tggtctaagc | aatgggttgt | caagcctgaa | atcgctcaaa | gttctattga | aaaaatccaa | 1140 |
| caagggtttg | cgcgattcta | cccttcta | tggatcaata | attacaacgc | ttggatgagg | 1200 |
| gaattacgcc | cttgggtgat | cagcaggcaa | ttgttttggg | ggcatcaaat | accgggtattc | 1260 |
| acttgcgaga | ataaccacca | gttcgtaagc | ttagacaccc | ccttaagttg | ccctacttgt | 1320 |
| aagagcgaaa | cactagagca | agataaggat | gtgctagaca | catgggttag | ttcagggtcta | 1380 |
| tgggcgtttt | ccactctagg | gtgggggcaa | gaaaaaagcg | gtttgtttta | tgaagcgat | 1440 |
| ttgaaagatt | tctaccctaa | cacaacgctc | attactgggt | ttgacatcct | cttttttttg | 1500 |
| gtggctagga | tgcttttttg | cagcgaatcg | cttttaggcg | aattgcctct | ttaagatatt | 1560 |

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|------------|------|
| tacttgcacg | ccttagtgag | agatgaaaag | ggtgaaaaaa | tgagcaaatac | taagggtaat | 1620 |
| gtgatcgatc | cttttagagat | gatagaaaaa | tacggcgcg | atagcttgcg | tttcacttta | 1680 |
| gccaatltgt | gcgctacggg | tagggacatt | aagctttcca | ctacgcattt | agaaaaaac | 1740 |
| aagaatttgc | ccaacaagct | ttttaaatgcg | gcgagttact | tgaagctcaa | acaagaatct | 1800 |
| ttcaaagata | aagagcggtt | gaatgaatac | caaacgcctt | tggggcggtta | tgcgaaatcg | 1860 |
| cgcttgaatt | cagcgactaa | agaggcgcg | aacgcttttag | ataattatcg | ttttaatgac | 1920 |
| gccacgactt | tggtataccg | ctttttgtgg | ggggaatttt | gcgactgggt | cattgaattt | 1980 |
| tctaaagtgg | aaaaatgaagc | gatagacgaa | ttaggggagcg | tgtaaaaaga | ggctttaaaa | 2040 |
| ctcttgcacc | ctttcatgcc | ctttatcagc | gagtcctttat | accacaagct | cagcaatacg | 2100 |
| gaactagaaa | acactgaatc | tatcatgggtc | atgccttacc | ctaaagattt | ggcgcaagat | 2160 |
| gaaaaattag | agcatgaatt | tgaagtgatt | aaagattgca | ttgtgtcttt | aaggcggtta | 2220 |
| aaaatcatgc | tagaaacccc | accgattggt | ctaaaagaag | cgagcggtgg | attaagagaa | 2280 |
| gccatagaaa | acacagagcg | tttgcaaaact | tacgcccaca | aattagcgag | gttggaaaaa | 2340 |
| gtcagcgtag | ttagtcttaa | gcctttaaaa | agcgtgagcg | atgtggggga | attttgccag | 2400 |
| acttatcgca | atttagaaaa | tcttgattta | agccgcgttg | ttgcgcgttt | gaaaaagcag | 2460 |
| ttggaaaaat | tggaaaaaga | aaaattaaaa | ctcaatttgc | acaatgaaaa | ttttgtcaaa | 2520 |
| aacgcgccta | aaagcggtgct | agaaaaagct | aaagagagtt | taaaaacgct | tttagaaaaa | 2580 |
| gaaagtaaaa | ttaagcaaga | attggacttg | ttagaacaac | ca | | 2622 |

Seq ID 100

| | | | | | | |
|------------|-------------|-------------|-------------|------------|------------|-----|
| atgaaaaaaa | cttttttgat | cgcttttagcg | cttacggctt | ctctttagg | cgctgaaaat | 60 |
| accaaatggg | attataagaa | taaagaaaat | ggcccacacc | gctgggacaa | attgcacaaa | 120 |
| gattttgaag | tgtgcaaaaag | cggtaaaagc | caatcgccca | tcaacattga | gcattactac | 180 |
| cacacgcaag | ataaagccga | tttgcaattc | aaatcacgcg | cttctaacc | taaagcggtc | 240 |
| tttttcaccc | accacacttt | aaaggcttcg | tttgagccga | ctaaccacat | caattataga | 300 |
| gggcatgact | atgtgttgga | taatgtgcat | ttccacgccc | ctatggagtt | tttaatacat | 360 |
| aataaaacca | ggccttttag | cgcgcatctc | gtgcataaaag | acgctaaagg | gcgtttgcta | 420 |
| gtgttagcga | ttggttttga | agaagggaaa | gaaaacccca | accttgatcc | tattttagaa | 480 |
| ggcattcaaa | agaaacaaaa | ttttaaaagag | gtggcttttag | acgctttctt | gcctaaaagc | 540 |
| atcaattact | accatttaac | ggctctctca | cgcctcctcc | ttgcacagag | ggggtggcat | 600 |
| ggtttg | | | | | | 606 |

Seq ID 101

| | | | | | | |
|-------------|------------|-------------|-------------|------------|-------------|------|
| atgtcaaaaa | aaattccctt | aaaaaacgcg | ttgagagctg | attttacaaa | aaccccaaca | 60 |
| gatttagaag | tccctaattt | attattatta | caacgagaca | gctatgattc | tttcttgat | 120 |
| tctaaagagg | gtaaagagag | cgggattgaa | aagggtttta | aatccatttt | ccctatccaa | 180 |
| gatgagcata | accgcatcac | tttagaatac | gcgggttgcg | aatttggaac | gtctaataac | 240 |
| accgttagag | aagcgatgga | gaggggcatt | acctactcta | tccctctcaa | aattaagggtg | 300 |
| cgcttgatct | tgtgggaaaa | agataccaag | agtggcgaaa | agaacggcat | taaggatatt | 360 |
| aaagaacaaa | gcattttcat | tcgtgagatc | cctttgatga | cagaacgcac | ttcattttatt | 420 |
| attaatgggg | tggagcgcg | ggtggtcaat | caactccaca | gaagccccgg | tgtgattttc | 480 |
| aaagaagaag | agtctagcac | ttctttaaac | aagctcattt | acacagggca | aatcattcct | 540 |
| gataggggtt | cgtgggttga | ttttgaatac | gattctaaaag | atgttttata | cgctcgtatc | 600 |
| aataaacgcc | ctaaagtgc | tgttaccatt | ttattcaggg | cgatggatta | tcaaaaacaa | 660 |
| gacatcatca | aaatgttcta | cccgttgtt | aaagtgcgtt | atgaaaacga | taaatatttg | 720 |
| atcccgtttg | cttcattaga | cgccaatcaa | agaatggaat | ttgacttgaa | agatcctcaa | 780 |
| ggcaagggtta | ttcttttagc | gggtaaaaaag | ctcacttcaa | gaaagattaa | agagcttaaa | 840 |
| gaaaaccatt | tagaatgggt | ggaataccct | atggatattt | tactcaatcg | ccatttagct | 900 |
| gagcctgata | tgttagggaa | agaagtctta | ttggacatgc | tcactcagct | agataaaaaac | 960 |
| aaattagaaa | aaatccacga | tttaggcgtg | caagaatttg | tgatcatcaa | cgatctggcg | 1020 |
| ttagggcattg | acgcttccat | tatccaatct | ttttcagccg | attctgagtc | tttgaaatta | 1080 |
| ctcaagcaaaa | ccgaaaaaat | tgatgatgaa | aacgctctag | cggcgattcg | tatccataag | 1140 |
| gttatgaaac | caggcgatcc | cgttacgact | gaagtggcta | agcagtttgt | caaaaaactt | 1200 |
| ttctttgatc | cagaacgcta | tgatttgacc | atggtgggcc | gcatgaaaat | gaatcacaag | 1260 |
| ttaggccttg | atgtgcctga | ttacattacg | actttaacgc | atgaagatat | tatcaccacc | 1320 |
| gttaaatacc | tcatgaagat | caaaaacaat | caaggcaaga | ttgatgacag | ggaccacttg | 1380 |
| ggcaatcgta | ggattagggc | ggtaggggaa | ttgttggcca | atgaattgca | ttcagggtta | 1440 |
| gtgaaaatgc | aaaagaccat | taaaagacaag | ctcactacca | tgagcggggc | ttttgattcg | 1500 |
| ctcatgcccc | cttacttggt | caattctaaa | atgatcaca | gcacatcat | ggaatttttc | 1560 |
| atgggcgggtc | agctctcgca | atztatggat | caaacgaatc | ccttgagtga | ggttacgcac | 1620 |
| aagcgccgct | tttcagcgct | cggcgaaagg | gggttggtga | aagacagagt | ggggttgaa | 1680 |
| gccaggggatg | tgcacccac | gcattatggc | cgaatttgtc | ccattgagac | cccagaaggt | 1740 |
| caaaatatcg | gtctgatcaa | caccctttcc | actttcacaa | gagtgaatga | tttaggcttt | 1800 |
| attgaaagccc | cttataaaaa | ggttgtggat | ggcaaggctc | tgggtgagac | gattttattg | 1860 |
| accgctattc | aagaagacag | ccacatcatc | gctccgcgaa | gcaccccat | tgatgaagag | 1920 |
| gggaatattt | tgggcgattt | gattgaaacg | cgcgtggaag | gcgagatcgt | tttaaacgaa | 1980 |
| aaaagcaaaag | taactttaat | ggatttaagc | tctagcatgc | tagtgggggt | agccgcacgc | 2040 |
| ctcattcctt | tcttagagca | tgatgacgcc | aaccgtgcct | taatggggac | taacatgcag | 2100 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| cgccaagcgg | tgcccttatt | aagaagcgac | gctcccattg | taggcacggg | gattgaaaaa | 2160 |
| attattgcta | gggattcttg | gggagcgatc | aaagccaatc | gcgcaggcgt | tgtagaaaaa | 2220 |
| attgattcta | aaaatattta | tatttttaggc | gaaagcaaa | aagaagccta | tattgatgcg | 2280 |
| tattctttgc | aaaaaaactt | gcgcaccaac | caaaacacca | gtttcaatca | agtcacctatc | 2340 |
| gttaaagtgg | gcgataaagt | gggagccggg | caaatcatcg | ctgatggccc | tagcatggat | 2400 |
| agaggcgagt | tgccgttagg | gaaaaatgtg | cgcggtggcg | tcgatgcctg | gaatggctat | 2460 |
| aactttgaag | acgcgatcgt | ggtgagttag | tgcataccta | aagatgatat | tttcaacttcc | 2520 |
| accacacattt | atgaaaaaga | agtggatgct | agggagctta | agcatgggtg | ggaagaattt | 2580 |
| accgctgata | ttcctgatgt | gaaagaagaa | gcgctcgctc | atcttgatga | aagcgggac | 2640 |
| gttaaagtgc | gtacttatgt | gagcgctggc | atgatttttg | tgggcaaaac | ttctcctaaa | 2700 |
| ggcgagatta | aaagcacgcc | tgaagagcgg | cttttaaggg | ctattttttg | ggataaagcc | 2760 |
| gggcatgtgg | tcaataagag | tttgatttgc | cctcccagtt | tggaaggcac | ggtgattgat | 2820 |
| gtgaaagtct | tcactaaaaa | aggctatgag | aaagacgcgc | gagtttttag | cgcgatgaa | 2880 |
| gaagaaaaag | ccaagcttga | tatggagcat | tttgatcgct | tgaccatgct | caatagagaa | 2940 |
| gaattgttgc | gcgttagctc | gctcctttct | caagcgattt | tagaagagcc | tttcagccat | 3000 |
| aacggcaagg | attataaaga | aggcgatcaa | atccctaaag | aagaaatcgc | ttcaatcaac | 3060 |
| cgcttcactt | tggctagtgt | ggtcaaaaag | tattctaaag | aagtgcacaa | ccactatgaa | 3120 |
| atcactaaaa | acaatttctt | agagcaaaag | aaagttttgg | gcgaagagca | tgaagaaaa | 3180 |
| ctttctattt | tagaaaaaga | tgatattttg | cctaattggc | tgatcaaaaa | agtcaagctc | 3240 |
| tatatcgcta | acaaacgaaa | gcttaaaagt | ggcgataaaa | tggaaggaag | gcattggga | 3300 |
| aaaggggattg | tgtctaatat | cggtccggtt | gcggatatgc | cttataccgc | tgatggcgag | 3360 |
| cctgtagata | ttgttttaaa | cccttttaggc | gtgccaagcc | gcatgaatat | cgggcagatt | 3420 |
| ttagaaatgc | atttaggctt | agtggggaaa | gaattttgga | agcaaatcgc | tcgcatgcta | 3480 |
| gaggataaaa | ccaaagattt | tgccaaagaa | ttgctgtcta | aaatgctaga | aatcgctaac | 3540 |
| gctattatga | aaaaagaccc | cttgacaatc | gctcgcttg | agaattgttc | tgatgaagag | 3600 |
| ctttttggaat | acgcataaag | ttggagcaag | ggcgtttaaga | tggtctatcc | tggtgttgaa | 3660 |
| ggcatctcgc | aagaaaaatt | ttataagcta | tttgaattag | ctaagatcgc | tatggatggc | 3720 |
| aaaatggatc | tgtatgacgg | acgcacaggc | gagaaaaatga | gggagcgcg | gaatgtgggc | 3780 |
| tacatgtata | tgatcaaact | ccaccattta | gtggatgaaa | aagtcacatgc | cagaagcaca | 3840 |
| ggcccttata | gcttagtaac | gcaccagccc | gtggggggtg | aagcgctctt | tggggggtcaa | 3900 |
| agggtttgggg | aaatgggaag | gtgggccttg | gagccttatg | gcgcagcgca | cactctaaaa | 3960 |
| gaaatgctca | ccattaaatc | cgatgatatt | agaggcagag | agaacgctta | tagggctatc | 4020 |
| gctaaagggtg | agcaagtggg | cgagagtga | atccctgaga | ctttctatgt | tttgactaaa | 4080 |
| gaattgcaat | cgctcgcttt | ggatattaat | atttttgggg | acgatgtgga | tgaggatgga | 4140 |
| gcacctaaac | ccattgtcat | taagaagat | gacaggccta | aagactttag | ctctttccag | 4200 |
| ctcacactag | ctagccctga | aaaaatccat | ctctggagtt | atgggggaagt | taaaaagcca | 4260 |
| gaaacgatca | attatcgcac | cctaaaacct | gaacgagacg | gcttgttttg | catgaaaatc | 4320 |
| tttggcccca | ctaaagatta | tgaatgcttg | tgccggcaaat | acaaaaagcc | tcgcttcaaa | 4380 |
| gacattggga | catgcgaaaa | atgcggcgtg | gcgatcacgc | actccaaagt | caggcggttt | 4440 |
| agaaattgggc | atattgaatt | ggccactcct | gtagcgcata | tctggtatgt | taattctgat | 4500 |
| cctagccgta | tcggcacgct | tttaggcgtt | aaagtgaag | acttagagcg | cggtgtgtat | 4560 |
| tatgaagctt | atatcgtaaa | agaaccaggc | gaagccgctt | atgacaatga | aggcactaag | 4620 |
| cttgatgatga | aatacgatat | tttgaatgaa | gagcagtatc | aaaatatctc | acgaagatac | 4680 |
| gaagacaggg | gctttgttagc | gcaaatgggc | ggtgaagcga | tcaaggattt | gttagaagaa | 4740 |
| attgatttga | tcaccttatt | gcagagtgtg | aaagaagaag | tgaaagacac | caattctgat | 4800 |
| gcgaaaaaga | aaaaactcat | taagcgtttg | aaagtggtag | aaagcttttt | aaattctggt | 4860 |
| aataggcctg | aatggatgat | gctcacggtt | ttaccgggtat | tgccaccgga | tttaaggcct | 4920 |
| ttagtcgcgc | tagatggcgg | gaagtttgca | gtcagcgatg | tgaatgaatt | gtatcgctcg | 4980 |
| gtcatcaatc | gtaaccaacg | cttgaaacgc | ttaatggagc | ttggagcgcc | agaaatcatt | 5040 |
| gtgcgcaatg | aaaaaaggat | gttgcaagaa | gccgtggatg | tgctttttga | taacggccgc | 5100 |
| agcactaatg | cgggttaaagg | ggctaacaaa | gcccttttaa | aatcgctcag | tgaaatcatt | 5160 |
| aaaggcaagc | aggggcgttt | caggcaaaac | cttttaggta | agcgcggtga | tttttcaggc | 5220 |
| agaagcggtga | ttgtggttgg | gcctaactct | aaaatggatg | aatgcgggtt | gcctaaaaac | 5280 |
| atggcggttag | aactcttcaa | accgcatttg | ttatccaagc | ttgaagagag | aggctatgcc | 5340 |
| accacgctca | aacaggctaa | acgcgatgatt | gagcaaaaaa | gcaatgaagt | atgggagtg | 5400 |
| ttgcaagaaa | tcacagaggg | gtatccggtg | ctactcaacc | gcgctcctac | cttgacacaag | 5460 |
| caatccattc | aagcgttcca | tccaaagctg | attgacggca | aagcgatcca | attgcacccg | 5520 |
| ttagtgtgtt | cagcgttcaa | cgccgatttt | gacggggacc | aaatggcggt | gcatgtgcct | 5580 |
| ttaagccagg | aagcgatcgc | tgaatgcaag | gtgctgatgc | taagctctat | gaatatcctt | 5640 |
| ttgctgctga | gcgtaaggc | cgtagccatt | cctagccaa | atatggtttt | agggctttat | 5700 |
| tatctttctt | tgtaaaagag | cggggtcaag | gcgagcata | agcttttttc | tagcgtgaat | 5760 |
| gaaatcatca | ccgccattga | cacgaaagaa | ttagacatcc | acgcaaagat | taggggttta | 5820 |
| gatcaaggga | atattatcgc | tacgagtga | gggcgcgatga | tcattaagtc | cattttgcct | 5880 |
| gatttttatcc | ctcaggattt | gtggaacaga | cccatgaaga | aaaaagatat | tggcgtgctt | 5940 |
| tggtgattatg | ttacataaagt | tgccggtatc | ggtattactg | caaccttttt | ggataattta | 6000 |
| aaaacgcttg | gcttttaggt | tgccactaag | gctggtattt | ctatctctat | ggaggatatt | 6060 |
| atcacgcca | aagacaagca | aaaaatggtg | gaaaaagcca | aagtagaggt | taaaaaaatc | 6120 |
| cagcaacaat | acgatcaagg | gctgctcact | gaccaagagc | gttacaataa | gatcattgac | 6180 |

| | | | | | | |
|-------------|------------|-------------|-------------|------------|-------------|------|
| acttgactg | aagtcaatga | caaaatgagt | aaagaaatga | tgaccgctat | cgcgcaagat | 6240 |
| aaagagggct | ttaactctat | ttatatgatg | gcagatagcg | gcgcaagggg | tagcgcggcg | 6300 |
| caaatccgtc | agctttcagc | gatgaggggt | cttatgacaa | agccggacgg | cagtatcatt | 6360 |
| gaaacgcca | ttatctctaa | ctttaaagag | gggttgaatg | tcttagaata | cttcaattcc | 6420 |
| acgcatggcg | ctagaaaggg | cttagcggat | acagcgctaa | aaacagccaa | tcgggggtat | 6480 |
| ttgaccagaa | agctcattga | tgtttcgcaa | aatgtcaagg | tggtgtctga | tgattgcggc | 6540 |
| acgcatgaag | ggattgaaat | cacggatatt | gcgggtggga | gtgagctgat | tgaaccttta | 6600 |
| gaagagcgta | tttttgggcg | cgttttatta | gaagatgtga | tcgatcccat | tacgaatgaa | 6660 |
| atcttgcttt | atgcggacac | tttgattgat | gaagaggggtg | ctaaaaaggt | ggttgaagcc | 6720 |
| gggattaaat | ccattacgat | ccgcacccca | gtaacttgta | aagcgccaaa | gggcgtgtgc | 6780 |
| gcgaaatgct | atggcctgaa | tttgggcgaa | ggcaagatga | gttatccggg | tgaagcgggtg | 6840 |
| ggcgtggtag | ccgcgcaatc | tattggggag | cctggaacgc | agctcacttt | aaggactttc | 6900 |
| catgtgggcg | ggacagcgag | caggagtcag | gatgagcgcg | aaatcgtagc | gagcaaaagaa | 6960 |
| ggttttgtgc | gtttttacaa | ccttaggact | tacacgaata | aagagggtaa | aaacattatc | 7020 |
| gctaaccgcc | gtaacgcttc | tatttttagtg | gtagagccta | agattaaagc | gccttttgat | 7080 |
| ggggaattac | gcattgaaac | ggtttatgaa | gaagtcggtg | tgagcgtgaa | aaatggcgat | 7140 |
| caagaagcta | aatttgtttt | aaggagaagc | gataattgtca | agccaagcga | attagccggc | 7200 |
| gttggcggtg | agattgaggg | gaaagtgtat | ttgccttatg | ctagtgggca | taaggtgcat | 7260 |
| aaggggggaa | gtatcgctga | tattatccaa | gagggctgga | atgtgcctaa | tcgcatccct | 7320 |
| tatgcgagcg | aattgctagt | caaggataat | gacctattg | cgcaagatgt | gtatgccaaa | 7380 |
| gaaaaaggcg | taatcaaata | ctatgtttta | gaggtcaacc | atttagagcg | cacctatggg | 7440 |
| atcaaaaagg | gcgatattgt | gagtgaaaaa | ggcttggttg | cggtgatagc | tgatgataat | 7500 |
| ggtaggggaag | ccgctcgcca | ttatatcgct | aggggttctg | agatcttgat | tgatgataat | 7560 |
| agtgaagtga | gcactaatag | cgtgatttct | aaaccacga | ctaacacttt | caaaacgatt | 7620 |
| gccacatggg | atccttacaa | caccctatc | attgcggact | ttaaaggtaa | gggtgggttt | 7680 |
| gtggatgtta | tcgcaggggt | tacggtcgct | gaaaaagaag | acgaaaatac | cggtatcaca | 7740 |
| agcttagtgg | tgaatgatta | cattccaagc | ggatacaaac | caagcttggt | tttagagggg | 7800 |
| gctaattggcg | aagagatgcg | ttatttccta | gagccaaaaa | cctctatcgc | cattagcgat | 7860 |
| ggctctagcg | tggagcaagc | tgaagtgtta | gcgaaaatcc | ctaaagcgac | cgttaaatct | 7920 |
| agggatatta | ccgggggtct | cccaagggtt | tcggaactct | ttgaagcgag | aaaacccaag | 7980 |
| cctaagaatg | tggcgatcct | ttctgaagtt | gatgggattg | tgagttttgg | caaaccatt | 8040 |
| cgtaataaag | aacacatcat | cgtaaactct | aaagatggcc | gttccatgga | ttattttgtg | 8100 |
| gataaaggca | agcaaatttt | agtgcagcc | gatgaatttg | tgcatgcggg | agaagcgatg | 8160 |
| acggacggag | taatttcaag | ccatgatatt | ttaaggatca | gtggcgaaaa | agagctttat | 8220 |
| aaatacattg | tgagcgaagt | ccagcaagtg | tatcgcaggc | agggggtgag | cattgcggac | 8280 |
| aagcacattg | aaatcattgt | ttctcaaatg | ctaagacagg | tgcgatattt | agacagcggg | 8340 |
| gatagcaagt | ttattgaagg | ggatttagtc | agtaaaaaac | ttttcaaaga | agaaaacgct | 8400 |
| cgtgtgatcg | ctttaaaagg | cgagccagcg | attgctgaac | cggtgctttt | agggatcact | 8460 |
| agagcggcta | ttgggagcga | tagcatcatc | tcagcggcct | ctttccaaga | aacgactaaa | 8520 |
| gttttaacag | aagccagtat | cgctatgaaa | aaagactttt | tagaggattt | gaaagagaat | 8580 |
| gtggtgttgg | ggaggatgat | ccctgtggga | acaggcatgt | ataagaataa | aaaaatcggt | 8640 |
| ttaagagcgc | ttgaggataa | ctctaaattt | | | | 8670 |

Seq ID 102

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|-------------|------|
| atggcaaaaag | aaaagtttta | cagaactaag | ccgcatgtta | atattggaac | cattgggcat | 60 |
| gtagaccatg | gtaaaacgac | tttgagtga | gcgatttcag | cggtgctttc | tttgaaagg | 120 |
| cttgacagaaa | tgaagacta | tgataatatt | gataacgccc | ctgaagaaaa | agaaagagg | 180 |
| atcactatcg | ctacttctca | cattgaatat | gagactgaaa | acagacacta | tcgcgatgtg | 240 |
| gattgcccgag | gacacgctga | ctatgtaaaa | aacatgatca | ccggtgcggc | gcaaatggac | 300 |
| ggagcgattt | tgggtgtttc | tcgagctgat | ggccctatgc | ctcaaaactag | ggagcatatc | 360 |
| ttattgtctc | gtcaagtagg | cgtgcctcac | atcgttggtt | tcttaaacaa | acaagacatg | 420 |
| gtagatgacc | aagaattggt | agaacttgta | gaaattggaag | tcgcgcaatt | gttgagcgcg | 480 |
| tatgaatttc | ctggcgatga | cactcctatc | gtagcgggtt | cagctttaag | agcttttagaa | 540 |
| gaagcaaaagg | ctggtaaatgt | gggtgaatgg | gggtgaaaaag | tgcttaaaact | tatggctgaa | 600 |
| gtggatgcct | atatccctac | tccagaaaga | gacactgaaa | aaactttctt | gatgccgggt | 660 |
| gaagatgtgt | tctctattgc | gggtagaggg | actgtggtta | caggtaggat | tgaagagggc | 720 |
| gtgggtgaaag | taggcgatga | agtggaatc | gttggtatca | gacctacaca | aaaaacgact | 780 |
| gtaaccgggtg | tagaaatggt | taggaaagag | ttggaaaaag | gtgaagccgg | cgataatgtg | 840 |
| ggcgtgcttt | tgagaggaac | taaaaaagaa | gaagtggaaac | gcggtatggt | tctatgcaaa | 900 |
| ccaggttcta | tcactccgca | caagaaattt | gaggagaaaa | tttatgtcct | ttctaagaaa | 960 |
| gaaggcggga | gcacactoc | attcttcacc | aattaccgcc | cgcaattcta | tgtgcgcaca | 1020 |
| actgatgtga | ctggctctat | cacccttcct | gaaggcgtag | aaatggttat | gcctggcgat | 1080 |
| aatgtgaaaa | tcactgtaga | gttgattagc | cctgttgctg | tagagttggg | aactaaattt | 1140 |
| gcgattcgtg | aaggcggtag | gaccgttggt | gctggtgttg | tgagcaatat | tattgaa | 1197 |

Seq ID 103

| | | | | | | |
|-------------|-------------|------------|------------|-------------|------------|-----|
| gtgttaaatcg | ttcaaaaaata | cggcggcacg | agcatgggca | gcatagaaaag | gatccacaat | 60 |
| gtcgcctcaaa | gggttttaga | aagcgttaca | ttaggccatc | aagtcgtggt | ggtggtttca | 120 |

| | | | | | | |
|-------------|-------------|------------|-------------|-------------|------------|------|
| gcgatgagcg | gcgaaaccga | caggctttta | gaatttggca | agaatttttag | ccataaccct | 180 |
| aacaagcgag | agatggacag | gattgtaagc | gtgggggaat | tggtttcaag | tgcggttttg | 240 |
| agcatggcgt | tagaaaggta | tgggcataga | gccatttcct | tgagcgggaa | agaagcgggc | 300 |
| attttaacca | gctcgcatth | tcaaaacgcc | gtgatccaat | ccattgacac | caaacgcac | 360 |
| acagagcttt | tagaaaaaaa | ctacattgtg | gtgatcgctg | ggtttcaagg | cgctgatatt | 420 |
| caaggtgaaa | caacgacttt | agggcggtgg | gggagcgatt | tgagcgcggt | tgctttggcc | 480 |
| ggggctttta | aagcgcatth | gtgcgaaatc | tatacggatg | tggatggcgt | ttataccacc | 540 |
| gatccgcgca | ttgaagaaaa | ggctcaaaaa | atcgcgcaaa | tcagctatga | tgaaatgctt | 600 |
| gaactggctt | ctatgggggc | taaagtthta | ttaaaccgct | cgggtggaat | agccaaaaag | 660 |
| ctcagcgtag | agttagtgac | tgcgaattcg | tttaaccata | gcgaaggcac | gctcattgtg | 720 |
| gctgaaaaag | acttttaaagg | agaacgcacg | gaaaccccta | tagtgagtgg | gatcgcatth | 780 |
| gataaaaaatc | aggctcgtgt | gagcatggag | ggcgtggaag | atcgccagag | cattgcccgt | 840 |
| gaaatctttg | gcgcttttagc | ggagtatcgc | attaacgtgg | atatgatcgt | ccaaacgatc | 900 |
| ggcagagacg | gcaaaaccga | tttggttttt | acgatcgcta | aaacccaaat | agaagaaacc | 960 |
| aagcaagcct | ttaaagccttt | tttagcgcaa | atggattcca | ttgattatga | tgaaaaatc | 1020 |
| gctaaagtct | ccatagtggg | cgtgggcatg | aagtcgcatt | ctgggggtgg | gagtatcgct | 1080 |
| tttaaagccc | tagccaaaga | caatatcaat | atcatgatga | tttctacaag | cgagattaaa | 1140 |
| atttcgggtt | tgattgacat | taaatacgtc | gaatttagctg | ttagaacttt | gcacgcggtg | 1200 |
| tatcaattag | atcaa | | | | | 1215 |

Seq ID 104

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgaaaaaac | acatcctttc | attagcttta | ggctcgcttt | tagtttccac | tttgagcgct | 60 |
| gaagacgacg | gctttttacac | aagcgtaggc | tatcagatcg | gtgaagccgc | tcaaatggta | 120 |
| acaaacacca | aaggcatcca | acagctttca | gacaattatg | aaaatttgaa | caacctttta | 180 |
| acagagataca | gcaccctaaa | cacccttatc | aaattgtccg | ctgatccgag | cgcaattaat | 240 |
| gcgggtgcggg | aaaatctggg | cgcgagcgcg | aagaatttga | tcggcgataa | agccaactcc | 300 |
| cccgcctatc | aagccgtgct | tttagcgatc | aacgcggcgg | tagggttttg | gaatgtcgtg | 360 |
| ggctatgtga | cgcaatgtgg | gggtaacgcc | aatggctcaag | aaagcacctc | ttcaaccacc | 420 |
| atcttcaaca | acgagccagg | gtatcgatcc | acttccatca | cttgttcttt | gaacgggcat | 480 |
| aagcctggct | actatggccc | tatgagcatt | gagaatttta | aaaagcttaa | cgaagcctat | 540 |
| cagatcctcc | aaacggcttt | aaaaaacggc | ttaccgcgcg | tcaaagaaaa | caacgggaag | 600 |
| gtcagtgtaa | cctataccta | cacatgctca | gggcaaggga | ataataactg | ctcgccaagt | 660 |
| gtcaacggaa | ccaaaaccac | aacccaaacc | atagacggca | aaagcgtaac | caccacgatc | 720 |
| agttcaaaag | tggttggtag | catcgctagt | ggcaacacat | cacatgtcat | caccaacaaa | 780 |
| tttagcggtg | tgctcgatag | cgctcaagcg | ctcttagcgc | aagcgagcac | gctcatcaac | 840 |
| accatcaacg | aagcatgccc | gtattttccat | gctactaata | gtagttaggc | taacgccccca | 900 |
| aaattctcta | ctactactgg | gaaaatatgc | ggcgcttttt | cagaagaaat | cagcgcgatc | 960 |
| caaaagatga | tcacggacgc | gcaagagcta | gttaatcaaa | cgagcgatcat | taacagcaac | 1020 |
| gaacaatcaa | ctccggtagg | caataataat | ggcaagcctt | tcaacccttt | cacggacgca | 1080 |
| agttttgcgc | aaggcatgct | cgctaacgct | agcgcgcaag | ctaaaatgct | caatttagcc | 1140 |
| catcaggtgg | ggcaagccat | taaccacagag | aatcttagcg | agaattttta | aaattttgtt | 1200 |
| acaggctttt | tagccacatg | caataacaaa | tcaacagctg | gcaactgggtg | cacacaaggt | 1260 |
| tcagctccag | gcacagtgc | cactcaaaat | ttcgcttctg | gttgcgcgta | tgtggagcaa | 1320 |
| accctaagca | acttaggcaa | cagcatcgct | cactttggca | ctcaagagca | gcagatacag | 1380 |
| caagccgaaa | acatcgctga | cactctagtg | aaatttcaaat | ctagatacag | cgaatttaggc | 1440 |
| aacacctata | acagcatcac | caccgcgctc | tccaaagtcc | ctaacgcgca | aagcttgcaa | 1500 |
| aacgtgggtga | gcaaaaagaa | taaccctcat | agccctcaag | gcatagagac | caattactac | 1560 |
| ctcaatcaaa | attcttacaa | ccaaatccaa | accatcaacc | aagaactagg | gcgtaacccc | 1620 |
| tttaggaagt | tgggcatcgt | caattctcaa | accacaatg | gtgccatgaa | tgggtagcgt | 1680 |
| attcaggtgg | gctataagca | attctttggc | caaaaaagaa | aatggggcgc | taggtattac | 1740 |
| ggcttttttg | attacaacca | tgcgttcac | aaatccagct | ttttcaactc | ggcttctgac | 1800 |
| gtgtggactt | atggttttgg | agcggacgcg | ctttataact | tcatcaacga | ttaaagccacc | 1860 |
| aattttcttag | gcaaaaacaa | caagctttct | ttggggcttt | ttggcgggat | tgcgttagcg | 1920 |
| ggcacttcat | ggctcaattc | tgagtacgtg | aatttagcca | ccgtgaataa | cgtctataac | 1980 |
| gctaaaaatga | atgtggcgaa | tttccaattc | ttattcaata | tgggagtgag | gatgaattta | 2040 |
| gccagatcca | agaaaaaggg | cagcgatcat | gcagctcagc | atgggattga | gttagggctt | 2100 |
| aaaatcccca | ccatcaacac | gaactattat | tcctttatgg | gggctgaact | caaatacaga | 2160 |
| aggtctctata | gcgtgtattt | gaactatgtg | ttcgcttac | | | 2199 |

Seq ID 105

| | | | | | | |
|-------------|------------|------------|------------|------------|-------------|-----|
| ttggactctt | ttcattcatt | taatcagcat | gcatttaatc | ggcatgccaa | aacttatcac | 60 |
| ctttttgctc | atatccagca | gcaaatcgct | atctgtcttg | ttcaattttt | aaaacaaaaa | 120 |
| cattacgcta | aagttttgga | tcttgatca | gggagtgagg | ctgtttttta | cgcttttagag | 180 |
| cggcaaaaata | ttttgattga | agagtttatc | gctttggata | attccataaa | catgctcaaa | 240 |
| ttacacccca | cgcattctat | taacattcaa | aaaatctctt | tagagcatgc | ggattttgaa | 300 |
| gaacatgttt | tttgacttta | tgatctggtt | gtgtcttctt | cttctttaca | atgggcaagg | 360 |
| gatttaaaaa | gcgttttaga | aaaaatcgct | ctttctagta | aggaggtggc | tttagctatc | 420 |
| catacggatt | ttagtttgca | tgaagtgcac | gagtttttag | gcacgccttc | gcctttaagg | 480 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gatcttaaaa | cgctcaaata | cttgattaaa | aacgctttta | aacattttca | aatagaatta | 540 |
| gaaaacaagc | gcttcgctct | ttatttcaac | cgcaacaag | attgcttgaa | ttaccttaaa | 600 |
| aatgcggtc | ttttaggggg | ttcaacgctg | agtttcaagc | aaaaaaaaa | tttttttcaa | 660 |
| aacatggcgt | ttgaaaaatt | gagctatgaa | gtgttactct | tttctgggat | caagcgttct | 720 |

Seq ID 106

| | | | | | | |
|-------------|-------------|------------|-------------|------------|------------|-----|
| ttgagcggct | ttaacccctt | aaattctccc | ttagtgcgaa | gctcttctct | tagcttgaaa | 60 |
| gaagcctatt | atttagaaaa | attatctctt | aaaaaagggt | ttaaaatcca | ttacaagatg | 120 |
| accaaagata | gcttaaacct | tttagaaaaa | agcgatttgt | gcgttttgtt | tgggggtttt | 180 |
| tcaaagcgtt | gtttgaatga | aaacgaacga | tggatttttag | aaagcattag | ccactcaaaa | 240 |
| cgccctacg | ccttgtttaag | acccttacaa | gatacaagag | acttgcaaga | aaattgcctt | 300 |
| tttgcgtctt | atgaaatcca | cacggaagcg | gcgatttttg | ccttgatttt | aaggggcatt | 360 |
| ttggaacaaa | cttcccaatt | aaaaggcat | gttttagaaa | aaatagatgt | ggggtattta | 420 |
| agctctgaag | cgaacatgag | cgaagaggaa | ttgcaagagc | ttatcgcgct | tattgtttaa | 480 |
| gcaaaaaaaaa | gggcacttgt | tttaaataga | gaaatcacta | agcatgctaa | caacgcgttt | 540 |
| ttatacaccc | ttttaagcga | gttgcaaaat | tacctagaaa | ttttacacat | cccttgctat | 600 |
| gattcaagtg | caacgaccgc | tttttatgat | tttaaatgat | aagaatggct | gctagaaaca | 660 |
| gccttttaag | agggcatttt | gccttttaaa | tgcgaactcc | aatcaaaaga | tttagagctt | 720 |
| ttagagcgaa | tcagtggagg | taacggctcg | tttgtctatg | tttcttacaa | gagccttgaa | 780 |
| acccccaaat | tatctttttc | caagcaattt | aagatcgcta | ataagattga | gcattctaaa | 840 |
| gcgggggtttc | aaatctccaa | tcaaacgcta | gaatgcgagt | tagaagaaaa | ccccatttgg | 900 |
| aagggtttga | ttgcgatttt | agaaggggcg | ttttttgacg | cttaccctta | tatccctatt | 960 |
| ttatcccact | ctcaaggaat | ttca | | | | 984 |

Seq ID 107

| | | | | | | |
|------------|-------------|------------|------------|-------------|-------------|------|
| atgatcagtc | tcatagaaaa | agcccttac | attccctacc | ccctagctct | ttatgaaaaa | 60 |
| ttagagcaac | cacacacctt | gctttttgaa | agcgtgaga | ttgagagcaa | agcacacacc | 120 |
| aatccctttt | taatggctaa | agcctgtttg | aagctcattt | gcaaccacaa | catcgtaact | 180 |
| atcactagcc | tgacgcctaa | tggcggggca | tttttgcaaa | aattgagcgc | gtttttttaa | 240 |
| acgcccatac | aagacaatgc | cctaatttta | acctacacca | aaaataaaaa | aacgcaagat | 300 |
| gagtttttaa | aactctttga | ccctagccct | tttgacgctt | taagggggct | ttttaaaagc | 360 |
| gttaaaacaa | aacccaaaca | cccctttacg | cttttaagcg | cggtgttttt | ttcttttgaa | 420 |
| atgctcaatt | tttttgaaga | tttgcctcac | ttaaaagcga | aagacaacac | agtgcattgac | 480 |
| tttatttttt | atctcgcgca | aaatttgatc | atcatagacc | ataaagaaaa | aagcgttgaa | 540 |
| atcttggggg | cgtgttttga | tgagcgcttt | aaaacagaga | tagcccaaga | attacaagac | 600 |
| ttaaaagagt | tggttaaaaag | catcaaaagc | gactttgtcc | ctaaaaaatc | caagcaaagt | 660 |
| agagaagtta | gcgctaattg | tagcgatagc | gagtttgaaa | aaagagtgc | atccttacaa | 720 |
| gaagaaatca | aaaaaaggcg | gatttttcaa | gcggtgttgt | cgcgagctt | ttatatggag | 780 |
| tgcttggagg | gtttgagcgc | gtattaccat | ttaaagctaa | ctaatacctag | cccttatatg | 840 |
| ttctatatca | aagacagcga | tttcattctt | tttggggcaa | gocctgagag | cgctttaaag | 900 |
| tacaacgctt | taaccaacac | ggctgaaatt | tatcccatgt | ctggcaccgc | tttaaggggt | 960 |
| aaggacaaac | aggggaatat | tgattacgat | ttggatagta | aaatggaatt | tgatttgcaa | 1020 |
| cacgactata | aagaaaggcg | tgaacacatc | atgctagtgg | atttagccag | aaacgacatg | 1080 |
| gccagagttt | caaaaaaacg | ctattgcgac | aagcttttaa | aagtggataa | gtattccaat | 1140 |
| gtcatgcatt | tagtctcaag | ggttgtgggg | gaattgaaaa | aaggggtgcga | tagtttgcat | 1200 |
| gcctacagga | gctttatgaa | gcgcggcagc | cttagcgggg | cgcttaaaat | ctctgcgato | 1260 |
| aggctcattt | accaattaga | aaaccaaagg | agaggctctt | atggggggag | cgtgggggat | 1320 |
| ttaaatagcg | agggttctat | ggattcttgc | atcaccatcc | gttcatgttt | tgtcaaaaac | 1380 |
| aatagggcgc | tgatccaagc | aggagccggt | attgtgctag | acagcgtgcc | acaaaacgaa | 1440 |
| gcgaatgaaa | caagagccaa | agcgaagcc | cttattgatg | cgatcaggaa | aacaagctta | 1500 |

Seq ID 108

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| atgatagaaa | agatcattga | tttaagcgtt | aaaaacaaac | tccttaccac | tttagtcact | 60 |
| ctactcattt | ttttagcctc | tttgtgggcg | ataaaaagcg | ttcgtttaga | cgctttgcgc | 120 |
| gatttaagcc | ccgctcaagt | ggtcgtgcaa | atcacttacc | ccaatcaaag | ccctaaaatc | 180 |
| gtgcaagagc | aggttactta | cccgttagtt | tactatttca | tgagcatcgc | taacattgac | 240 |
| acggttaggg | ggatttctag | ctatgagagc | ggtttgattt | acatcatttt | taaagacggc | 300 |
| gtcaatctgt | attgggctag | ggatagggtt | ttagagcaat | taaaccgagt | gagtaacctc | 360 |
| cctaaggacg | ctaaagtaga | aatagggagc | gattccactt | ctattgggtg | ggcgtatcaa | 420 |
| tacgctctat | ctagcgatag | caagaattta | agcgatttga | aagtcttgca | agatttttat | 480 |
| taccgctacg | ctcttttagg | ggttgatggg | gtgagtggag | ttgcaagcgt | ggggggcttt | 540 |
| gtaaaagatt | atgaagtaac | gcttcaaaac | gattctctga | tccgctataa | cttgagttaa | 600 |
| gagcaagtgc | ctaacgcgat | taaaaattcc | aataacgata | ccggtggggg | cgtattttta | 660 |
| gaaaacgggt | ttgaaaaaat | tataagatcg | catggctata | tccaatcttt | gaaggattta | 720 |
| gaagaatttg | tggttaaaaa | agaaggggct | atccctttaa | aaatcaaaga | tatagccagc | 780 |
| gttaggctaa | gcgccaaacc | acgccaaggg | gcgccaaccc | ttaatggcga | taaggaagtg | 840 |
| gtgggcggga | ttgttatggg | gcgctatcac | gtgcacactt | ataaggtgct | taaagccatt | 900 |
| aaagaaaaaa | tcgccacctt | acaagcgagt | aaccctgatg | tgaaaatcac | cagcgtgtat | 960 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| gacaggagcg | aattgattga | aaaaggcatt | gacaatttaa | tccacacgct | catagaagaa | 1020 |
| agcgtcattg | tgctagtcac | tattgctgatt | tttttactgc | atttcaggag | cgcttttagtg | 1080 |
| gtgattatca | cttttgccctt | aagcgtgtgc | atcagtttct | tgctcatgcg | ttatttcaat | 1140 |
| attgaagcga | gcattatgag | tttagggggc | attgcatgcg | ctataggggc | gatgggtgat | 1200 |
| gcggctattg | tgatggtaga | gaacgctcac | aagcacttgc | aacacattga | tgtaaaaggac | 1260 |
| aacgctcaaa | gggttaaatgg | cattatagaa | gggtttaaagc | atgtgggggg | cgcgatattt | 1320 |
| tttgcttttaa | tgatcatcgt | ggtttctttc | ttgccaattt | ttgcactcac | cgcccaagaa | 1380 |
| gaaaagcttt | ttgccccttt | agcttacacc | aaaacctttg | ccatgctagt | aggagcgcgtg | 1440 |
| ctttctatca | ccatgggtccc | tatttttaag | gtatggctca | ttaaaggggcg | gatttttagaa | 1500 |
| gagtcctaaaa | acccgattaa | cgcttttttc | atgaaaattt | atggcgtgag | cttgaatgtt | 1560 |
| gtgcttaaat | tcagatacgc | ttttttaata | gcaagcgtcc | tgggtttagg | gggcttggtat | 1620 |
| gtagcgtata | aaaaactcaa | ctgggaattt | atcccccaa | tcaatgaagg | ggtagtgatg | 1680 |
| tatatgcctg | taaccattaa | tggcgtgagc | attgataccg | ctttagaata | tttgaaaaaa | 1740 |
| agcaatagcg | ctatcaagcg | attggatttt | gtcaaacaa | tttttggtaa | agtggggcgc | 1800 |
| cctaacacca | gcaccgatgc | tgccggcttg | agcatgatag | aaacctacat | tgaattaaag | 1860 |
| ccgcaaaacg | aatgggaaaga | aaagctcagt | tataaagaag | ttagggataa | attagaaaaa | 1920 |
| accctgcaat | taaaaggctt | gaccaattca | tggacttacc | ccattcgtgg | gagaacggac | 1980 |
| atgctcttaa | ccgggattag | aacgccccta | ggcatcaagc | tctatggcaa | tgacacggat | 2040 |
| aaattacaag | aattagcgat | ccttatggag | caacagctca | aaaccctaaa | agagagtttg | 2100 |
| tccgtctttg | ccgagcgatc | caataacggc | tactacatca | cgctggattt | gaacgatgaa | 2160 |
| aatctggctc | gttatggcat | caataaaaa | gccgtgttag | atgcgattaa | attcgctttg | 2220 |
| ggaggagcca | cgctcactac | catgattaag | gggttagaaa | actatcccat | ttctttacgc | 2280 |
| ttagaagaca | cagaaagaaa | caccattgaa | aaattaaaaa | acctctacat | caaaaccgct | 2340 |
| tacaattaca | tgcccttaag | ggagttagcc | cgcatctatt | acgacaactc | gccggcgggtg | 2400 |
| ttaaagagcg | aaaagggtct | gaacgtgaat | tttatttata | ttgtgccgca | aaatgggtatc | 2460 |
| agctctgatg | cttacagaca | actggctcaa | aaagcgttag | aaaaaatcca | attgcctaac | 2520 |
| gggtattatt | atgaatttag | cggcgaaagc | cagtatttag | aagaagcggt | taaaaccttg | 2580 |
| caatacatcg | tgccgggtgag | cggtgttatc | atttttat | taattgtctt | tgcttttaag | 2640 |
| aatctcacca | attccttact | atgctttttc | actctgcctt | ttgcgttttt | gggggggtta | 2700 |
| atttttatga | attctcatggg | atttaacatg | agcgtggcgg | cgttagtggg | ctttttggcc | 2760 |
| ctttttagggg | tagcgagcga | aacggctatt | gtgatgatta | tttatttaga | ggatgcgttt | 2820 |
| caaaaattca | tcaaaacccc | tttaaaagag | caaaacagca | ccactttaaa | agaggccatc | 2880 |
| atgcatgggg | cggtgcttag | ggttaaggccc | aagcttatga | ccttttttag | catttttagct | 2940 |
| tactcatctc | caatcatgta | tagccatggc | acaggttctg | aaatcatgaa | atccatcgcc | 3000 |
| gcgcccacgc | tagggggcat | gataagcagc | gttggtttta | cgctttttat | tatccctacg | 3060 |
| gcgtattttg | tgatcaagaa | tgccgggaatt | aaaagcaatc | aaaca | | 3105 |

Seq ID 109

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| atgtctgtat | cgcatgttgc | tttaatctta | aggaaattgt | tttatcatag | acaaggagtt | 60 |
| tttatggggc | gtttttcagt | gggaatgttg | aaagattatg | tggacatatt | tggttttgcg | 120 |
| gtgcttggtg | tggccagttt | tttagctttg | tgggttgcca | ttgaaagggt | tattttttat | 180 |
| tctaaagtcg | atttgaaagc | ttatgacgat | atagatgccc | tgaatttgga | tttaaccaag | 240 |
| aatctaacca | ttctctatgt | gattttttct | aacgcgcctt | atgtgggctt | attagggacg | 300 |
| gttttagggg | ttatgggtgat | tttctatgac | atgggcgtga | gcggcgggat | ggacgctaaa | 360 |
| acgatcatgg | taggtttgtc | tttggcttta | aaagcgaccg | ctctagggct | tgctgtggcg | 420 |
| attcccactt | tgatcgctta | taatagcttg | ttgagaaaat | ccgatgtttt | gagcgaaaaa | 480 |
| ttcaggatca | tgaaaaaa | | | | | 498 |

Seq ID 110

| | | | | | | |
|-------------|------------|------------|------------|------------|-------------|-----|
| atgaaaattt | ctccatctcc | acgcaagctc | agtaaagttt | caacgagtgt | tagcttttta | 60 |
| atctcttttg | ccctatacgc | tatagggttt | ggctattttt | tactgcgcga | agacgccccca | 120 |
| gagccttttag | cgcaagccgg | gaccactaag | gttaccatga | gtttagccag | catcaacact | 180 |
| aattccaata | caaagactaa | tgctgagtcg | gctaaaccca | aagaagagcc | taaagaaaaa | 240 |
| cccaagaaa | aagagccaaa | aaaagaagaa | cccaaaaagg | aggttacaaa | gcctaaacct | 300 |
| aagcctaacc | ccaagccaaa | gccaaaacca | aaacctaagc | ctgaacccaa | acctgaacca | 360 |
| aaacccgagc | ctaagcctga | gcctaaagtt | gaagaggtta | aaaaagaaga | gcctaaagaa | 420 |
| gagcccaaaa | aagaagaagc | taaagaggaa | gctaaagaaa | aaagcgctcc | taaacaagta | 480 |
| acaactaagg | atatagtcaa | agaaaaagac | aagcaagaag | aatccaacaa | aacctctgag | 540 |
| ggggccactt | ctgaagctca | agcttataac | ccaggggtga | gcaacgaatt | tttaatgaag | 600 |
| atccaaacccg | ctattttctt | taaaaaccgc | taccctaaaa | tggcgagat | taggggtatt | 660 |
| gagggcgaa | tggtgtgag | ctttacgatc | atgctgatg | ggagcggtac | ggacattaaa | 720 |
| gtgggtcaaaa | gcaacaccac | agatatttta | aacctgcgg | ctttagaagc | cattaaaagc | 780 |
| gcggcacatc | tattccctaa | accagaagaa | accgtgcac | taaaaatccc | tatcgcttat | 840 |
| agcttgaaa | aagac | | | | | 855 |

Seq ID 111

| | | | | | | |
|------------|------------|------------|-------------|-------------|------------|-----|
| atgaaaaaat | ccctcttact | ctctctttct | ctcatcgctt | ccttatcaag | agctgaagat | 60 |
| gacggatttt | atacgagtgt | gggctatcag | atcgggtgaag | cggctccaaca | agtgaaaaa | 120 |

| | | | | | | |
|------------|-------------|------------|-------------|-------------|------------|------|
| acaggagcat | tgcaaaatct | tgcagacaga | tacgataact | taaacaacct | tttaaacc | 180 |
| tacaattatt | taaattcctt | agtcaattta | gccagcacgc | cgagcgcgat | caccggtg | 240 |
| attgataatt | taagctcaag | cgcgattaac | ctcactagcg | ccaccaccac | ttcccccg | 300 |
| tatcaagctg | tggctttagc | gtcfaatg | gctgtgggca | tgtggcaagt | catagccctt | 360 |
| tttattggct | gtggccctgg | ccctaccaat | aatcaaaagt | atcaatcggt | tggtaacaca | 420 |
| ccagccctta | atgggaccac | caccacttgc | aatcaagcat | atgggacagg | ccctaattgg | 480 |
| atcctatcta | ttgatgaata | ccaaaaactc | aaccaagctt | atcagatcat | ccaaaccgct | 540 |
| ttaaacccaa | atcaaggggg | tgggatgcct | gccttgaatg | acaccaccaa | aacaggggta | 600 |
| gtcaacatac | aacaaaccaa | ttataggacc | accacacaaa | acaatatcat | agagcattat | 660 |
| tatacagaga | atgggaaaga | gatcccagtc | tcttattcag | gcggatcatc | attctcgctt | 720 |
| acaatacaat | tgacatacca | taataacgct | gaaaaccctt | tgcaacaagc | cgccactatc | 780 |
| atgcaagctc | ttattactca | aaagccgcat | gtgcaaacga | gcaatggcgg | taaagcgtgg | 840 |
| gggttgagtt | ctacgcctgg | gaatgtgatg | gatatttttg | gtccttcttt | taacgctatt | 900 |
| aatgagatga | ttaaaaacgc | tcaaacagcc | ctagcaaaaa | cccaacagct | taacgcta | 960 |
| gaaaacgccc | aaatcacgca | acccaacaat | tccaacccct | acacctctaa | agacaaaggg | 1020 |
| ttcgctcaag | aaatgctcaa | tagagctgaa | gtccaagcag | agattttaaa | tttagctaag | 1080 |
| caagtagcga | acaattttcca | cagcattcaa | gggcttattc | aaggggattt | agaagaatgt | 1140 |
| aaagcaggat | cggctggcgt | gatcactaat | aacacttggg | gttcagggtg | cgcgtttgtg | 1200 |
| aaagaaactt | taaactcctt | agagcaaac | accgcttatt | acggcaacca | ggtcaatcag | 1260 |
| gatagggctt | tggctcaaac | cattttgaat | tttaaagaag | cccttaacac | cctgaataaa | 1320 |
| gactcaaaag | cgatcaatag | cggtatctcc | aacttgccta | acgctaaatc | tcttcaaaac | 1380 |
| atgacgcatg | ccactcaaaa | ccctaattcc | ccagaaggtc | tgctcactta | ttctttggat | 1440 |
| tcaagcaaat | acaaccagct | ccaaaccatc | gcgcaagaat | tgggcaaaaa | ccctttcagg | 1500 |
| cgctttggcg | tgattgactt | tcaaaacaac | aacggcgcaa | tgaacgggat | cggcgtgcaa | 1560 |
| gtgggttata | aacaattcct | tggtaaaaaa | aggaattggg | gggttaaggta | ttatggtttc | 1620 |
| tttgattata | accatgctta | tatcaaatct | aattttttca | actccgcttc | tgatgtgtgg | 1680 |
| acttatgggg | tgggtatgga | cgctctctat | aacttcatca | acgataaaaa | caccaacttt | 1740 |
| ttaggcaaga | acaacaagct | ttcagtaggg | ctttttggag | gctttgcgtt | agccgggact | 1800 |
| tcgtggctta | attcccaaca | agtgaatttg | accatgatga | atggcattta | taacgcta | 1860 |
| ctcagcactt | ctaacttcca | atttttggtt | gattttaggct | tgagaatgaa | cctcgctatg | 1920 |
| gctaagaaaa | aagacagcga | tcatgcgctt | cagcatggca | ttgaactagg | ttttaagatc | 1980 |
| cccacgatca | acaccaacta | ttattctttc | atgggcgcta | aactagaata | cagaaggatg | 2040 |
| tatagccttt | ttctcaatta | tgtgtttgct | tac | | | 2073 |

Seq ID 112

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|------|
| atgttagcta | aaatgtcggt | tatgcaaaat | gttaaaaaa | ttcaagaagt | ggaagtgage | 60 |
| cataaaaggg | tgcttattag | agtggatttt | aatgtgcctt | tagatgaaaa | tttgaatatt | 120 |
| accgatgata | cgcgcattag | agagagcttg | cccaccatcc | aatattgtat | tgacaacaag | 180 |
| gctaaagata | ttatttttagt | gagccacttg | ggccgcctta | aaggggttga | agaaaaattg | 240 |
| agttttaagc | cttttttgaa | acgccttgaa | agactcttaa | accatgaagt | ggttttttct | 300 |
| caaaatattg | tgcacactca | gcaggcttta | aacgaaacg | cgccacaag | gatttttctt | 360 |
| ttagaaaata | tccgcttttt | aagaggcgaa | gaagaaaatg | atgaaaatct | ggctaaagat | 420 |
| ttagcgagct | tgtgcgatgt | gtttgtgaat | gacgcttttg | gcacgagcca | cagaaagcat | 480 |
| gccagcactt | atggcaccgc | caaattcgcc | cctattaaag | tgagcgggtt | tttactcaaa | 540 |
| aaagaaattg | attcggtttt | tcaagcggtt | aaccaccctt | tacgccctct | attgttgatt | 600 |
| ttaggggggg | ctaagggtcag | ctccaaactc | accctattaa | aaaacatttt | agatctcatt | 660 |
| gacaagctca | tcattgccc | ggcgatgagc | aacaccttct | taaaagcttt | aggctatgat | 720 |
| gtgcaagatt | cttctgtaga | agacgctcta | atcaatgacg | ccctagaatt | attgcaagc | 780 |
| gcgaaagaaa | aaaaagtcaa | agtctattta | cccatagacg | ctgtaaccac | tgatgatatt | 840 |
| ctcaacccca | aacacattaa | aatttcaccc | gtccaagaca | ttgagcctaa | gcacaagatc | 900 |
| gctgatatag | ggcctgagag | cttgaaatta | ttttctgaag | tcatagagag | tgacccacc | 960 |
| attttatgga | atggccctct | aggcgtgcat | gaaaaacaag | aattcgctag | aggcacaacc | 1020 |
| tttttagccc | acaaaatcgc | tgacacttac | gctttctcgc | tcattgggtg | ggcgataacc | 1080 |
| attgatgcga | tcaatcgcg | gggcgaaaag | gataacatga | gctttatctc | taccggtggg | 1140 |
| ggagcgagtt | tggaaattgt | agagggcaaa | attttacctt | gttttgaggt | tttggaacaa | 1200 |
| cgccat | | | | | | 1206 |

Seq ID 113

| | | | | | | |
|-------------|-------------|------------|------------|------------|------------|-----|
| gtgggtgttat | taacaatgac | aaaacgactt | tttaaagggt | tgtagcggt | ttctcttgct | 60 |
| ctgagtttgc | atggtgggtga | agttaaggaa | aaaaagccgg | ttaagccggt | ttaagaagat | 120 |
| cgcgaagaat | tagcggctaa | aagggtggaa | gcgttcagtc | gtttctctaa | tgtgggttca | 180 |
| gaaattgaaa | aaaaatatgt | ggataaaatc | agcatttctg | agatcatgac | ttaagcgatt | 240 |
| gaaggcttgc | tctctaattt | ggacgcgcat | tcagcgattt | tgaatgaaaa | gaagtttaag | 300 |
| gaatttcaag | cccaaaccga | gggcgaattt | ggggggcttg | ggatcacggg | ggcatgccc | 360 |
| gatggcggtt | taaccgttat | tgccccttta | gaaggcactc | cagcttacia | ggctgggggt | 420 |
| aagtcaggcg | ataacatttt | aaaaatcaat | aacgaaagca | cgtgagcat | gagcattgat | 480 |
| gatgcgatca | acctcatg | cggcaagcca | aaaaccctta | ttcagatcac | cggttgaaga | 540 |
| aaaaacgagc | caaaaccttt | agtgtttaac | atcattagag | acatcattaa | actccctct | 600 |

| | | | | | | |
|------------|------------|--------------|------------|------------|-------------|------|
| gtctatgtga | aaaagattaa | agaaaccct | tatctgtatg | tgagagtga | tggttttgac | 660 |
| aagaatgtta | ccaaatcgg | tttagaaggc | ttaaaagcta | accctaaggc | taaggggac | 720 |
| gtgttggtt | taaggggcaa | tcttgagg | ctattaaacc | aagcgggtgg | cttgtctaac | 780 |
| ctcttcatta | aagaggggt | tttagtctct | caaaaaggca | aaaataaaga | agaaaattta | 840 |
| gaatacaagg | ctaacggcag | agcccttat | accaatttgc | ctattgcggt | gttagtcaat | 900 |
| ggcggttcag | cgagcgcgag | cgagatcgte | gcaggggcac | tgcaagatca | caaacgggccc | 960 |
| gtgattatcg | gtgaaaaaac | cttttggttaag | ggaagcgtgc | agatgctgct | ccctgtcaat | 1020 |
| aaagacgaag | ccattaaaat | cacaaccgca | cgctactatt | tgccgagcgg | gcgtaccatt | 1080 |
| caagctaagg | ggatcacgcc | tgatattgtg | atttatccgg | gtaagtgcc | agaaaatgaa | 1140 |
| aacaaattca | gcttgaaaga | agcggatcta | aaacaccatt | tagagcaaga | gcttaaaaag | 1200 |
| attgatgata | aaaccccaa | ttccaaagag | gcggataaag | acaagaaaaa | cgaagaggaa | 1260 |
| aaagagatta | ctcctaaaat | gatcaacgat | gatattcagc | taaaaaccgc | tattgacagc | 1320 |
| ttgaaaacct | ggtctatcgt | tgatgagaaa | atggatgaaa | aagcgctaa | gaagaaa | 1377 |

Seq ID 114

| | | | | | | |
|------------|-------------|-------------|------------|------------|------------|------|
| atgaacgaaa | cgcttttattg | cagtttttgc | aaaaaaccag | aatcaagaga | tcccaaaaaa | 60 |
| cgccgcatta | tttttgcgag | caatctcaat | aaagatgtgt | gcgtgtgcga | atattgtata | 120 |
| gatgtgatgc | atggggaatt | gcacaaatac | gacaattctt | tattggcgct | caaaagagac | 180 |
| cgattgagaa | gaatggaatc | tagcgcttat | gaagaagagt | ttttactctc | ttacattcca | 240 |
| gcccctaaag | agcttaaggc | ggttttagac | aattatgtga | tagggcaaga | gcaggctaaa | 300 |
| aaggtttttt | ccgtagccgt | gtataacccat | tacaacgcgt | tatcttttaa | agaaaaactc | 360 |
| aaaaaacaag | acaaccaaga | cagcaatgtg | gagttagagc | atttagaaga | agtggagttg | 420 |
| agcaagtcta | atattttact | aatcgccct | acaggatcag | gcaaaacttt | aatggcgcaa | 480 |
| actctggcca | agcatttgga | tattcctatc | gccattagcg | atgcgactag | cttgactgaa | 540 |
| gcggtgatg | tgggcgaaga | cgtggaaaat | attctcaca | gattgttgca | agcgagcgac | 600 |
| tggaatgtcc | aaaaagccca | aaaagcgatt | gtgtttattg | atgagattga | taaaatcagc | 660 |
| cgtttgcag | aaaacgcctc | tatcactaga | gatgtttctg | gcgagggcgt | tcagcaagcg | 720 |
| ttgttgaaaa | tcgttgaaag | ttcttttagt | aatatcccc | ccaaaggcgg | cagaaagcac | 780 |
| cctgagggca | atttcattca | aattgacacg | agcgatattt | tattcatttg | tgctggagcg | 840 |
| tttgatgggt | tagctgaaat | cattaaaaaa | cgcaccacgc | agaatgtgtt | gggtttcact | 900 |
| caagaaaaga | tgagcaaaaa | agagcaagaa | gcgactctgc | atttagtcca | aacctatgac | 960 |
| ctggttactt | atgggcttat | ccctgagctt | attggccgtt | tgccggtttt | aagcacgcta | 1020 |
| gatagcatca | gtttagaagc | gatggtggat | attttacaaa | aacctaaaaa | cgctcttatc | 1080 |
| aagcaatacc | agcagctttt | caaaatggat | gaggtggatt | tgatctttga | agaagaagcc | 1140 |
| attaaagaaa | tcgctcaact | cgcattagaa | agaaaaaccg | gggctagggg | cttaagggcg | 1200 |
| atcattgaag | atttttgttt | ggatattatg | tttgatttac | ccaagcttaa | aggatcggaa | 1260 |
| gtgcgtatca | ctaaagattg | tgttttaaaa | caggctgaac | ctttgatcat | tgctaaaacg | 1320 |
| cattctaaaa | ttcttctc | | | | | 1338 |

Seq ID 115

| | | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|------|
| atgcgagatt | tcaataacgc | tcaaatcaca | cgcttaaaaag | tgctcaaaa | cgctgttttt | 60 |
| gaaaaattgg | atctggagtt | taaagacggc | ttgagcgcga | ttagtggggc | tagcgggggtg | 120 |
| ggaaaaagcg | ttcttattgc | gagtccttta | ggggcggttg | ggcttaaaaga | gagcaacgct | 180 |
| tcaaacattg | aagtgggaatt | gattgcgctt | tttttagaca | ctgaagaata | cggcattttt | 240 |
| agagaagatg | aacatgaacc | cttagtcac | agcgtgatta | aaaaagaaaa | aacgcgctat | 300 |
| tttttaaac | aaacaagcct | gttctaaaaac | acgtcacaag | cgttatttaa | agggtttgatt | 360 |
| aaacgcttgt | ctaacgatag | attcagccag | aatgaactca | acgatatttt | aatgctctcc | 420 |
| ttactggatg | gctatatcca | aaacgaaaat | aaggcggtta | gccccctttt | aggcgcgctt | 480 |
| gaagaaaaat | tcacccgatt | agagaagcta | gaaaaagaaa | ggcgatttgt | agaggataaa | 540 |
| aagcgtttcc | aaaaggattt | agaagaacga | ttgaattttg | aaaaaatgaa | attagagagg | 600 |
| ctggatttaa | aagaagatga | atcgaacgc | cttttagagc | aaaaaaaatt | gctttctagt | 660 |
| aaggaaaaac | tgaacgataa | aatcgctctg | gcgttagagg | tgctagaaaa | taccataaaa | 720 |
| atcacgcatg | cttttagagag | cgtgggcat | agcgcggagt | ttttaaaaag | cgctttatta | 780 |
| gaagcagcgc | ctctattgga | aaaagagcag | gctaaattag | aagagtgcga | gcgtttggac | 840 |
| attgaaaaag | ttctagaaaag | gcttggcatg | ctaagtggga | tcattaagga | ttacgggagt | 900 |
| attatgcatg | ctaaagaacg | attagggcat | gttaaaaaacg | aattgcacaa | cctaaaagaa | 960 |
| attgatagtc | attgcgaaac | ttaccacaaa | gaaatagagc | gattaaaaac | cgaatgcttg | 1020 |
| aaattgtgcg | aagaaataag | cggcttttaga | aaagagtatt | tagccgggtt | taacgctctt | 1080 |
| tttagcgcta | aagcgaaaga | tttgctccta | aaaagcccca | gtttgggttt | agaagacgcc | 1140 |
| cccatgagcg | aaaaaggcgc | tcaaaaactc | gttttgaatt | tgcaaaattc | ccaattagaa | 1200 |
| accttaagct | ctgggaataa | cagccggttg | agactggcgt | tcattgctttt | agaaatggaa | 1260 |
| tttttaagg | atttttaagg | cgtgttggtg | ttagatgaaa | tggtattcaa | tttgagcggc | 1320 |
| gaagagagtt | tggcgggtctc | taaagccctt | gaaaccttaa | gcagccattc | gcaaatcttt | 1380 |
| gccatttcgc | accaagtcca | tatcccagcg | ctcgctaaaa | acctatattt | agtcttcaaa | 1440 |
| gaaaaccaca | aaagccttgc | caaaaccctt | aataacgaag | aaagggtttt | agaaatcgcg | 1500 |
| cgcattgatg | gggggagcga | gaatatagag | agcgcgattt | ctttcgctaa | ggaaaaatta | 1560 |
| aaggcgcaag | aa | | | | | 1572 |

Seq ID 116

| | | | | | | |
|------------|------------|-------------|-------------|------------|------------|-----|
| atgccagacg | agctaagggc | agaaaaaagc | tttccgtcta | aaccctatga | ctctttaaaa | 60 |
| aacaagagtg | agtttgacag | ggttttatcaa | aagggggttta | aaaaacataa | cccttttttt | 120 |
| tcgctctttg | ttttggattt | gtcaccaagag | ccgccaaaag | aaaaagcggg | ctttaaagat | 180 |
| ccgctctttt | gtaggcttaa | agacaaaaaa | acgctttatt | tattaggctt | gagcgtgtcc | 240 |
| aaaaaagtgc | gcaacgcctg | gaaacgaaac | cttatcaaac | gccgtttgcg | ttcgcttaca | 300 |
| ttaaagcatg | ccgctctttg | tcaagggcct | gctttgggtg | ttgtgcctag | aagcgattgt | 360 |
| taccatttgg | atTTTTgggc | tttagaaaaa | catttttttag | aaatgctaac | ttccattaaa | 420 |
| aactatatga | acaaagcctt | aaaagacttg | aaaaaaggaa | taactcatac | ctatgcgaaa | 480 |
| caa | | | | | | 483 |

Seq ID 117

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|------------|------|
| atgttaaaac | tcgctagcaa | aacgatttgt | ttgtccctaa | tcgggtcatt | caccgctgta | 60 |
| gaagcctttc | aaaaacacca | aaaagacggc | tttttttatag | aagccgggtt | tgaaccggg | 120 |
| ctattgcaag | gcacacaaac | taaagaacaa | accatagcca | caactcaaga | aaaacctaaa | 180 |
| cctaaaccaa | agcccaaac | cattaccctt | caaagcacct | atgggaaata | ctacatctcc | 240 |
| caaagcacgc | ttttaaagaa | tgcgactgag | ttgtttgcag | aggacaatat | caccaactta | 300 |
| acctttttatt | ctttaacccc | tgtgtatgta | accgcttaca | accaagaaa | cgctgaagaa | 360 |
| gcaggctatg | gcgatagcag | cttaattatg | atacaaaact | tcttgcctta | taatttaaac | 420 |
| aatattgagc | tgagttatag | agacaatcaa | ggcaatgtag | tcagtttggg | cgtgatagag | 480 |
| actatccctc | aacaatctca | aatcattctg | ccgcgaagct | tgtttaacga | tccgcagctt | 540 |
| aacgctgatg | gcttccaaca | gctccaaact | gccaccacac | gattttctga | tgccagcacg | 600 |
| cagaatctgt | ttgataagct | cagtaagggt | acaaccaatc | ttcaaatgac | ttatatcaat | 660 |
| tacaaccaat | tttctagcgg | taatggcagt | ggttctaacc | ccccatgcc | tccatacgaa | 720 |
| aaccaagaaa | actgcacggc | taaagtgcg | cctttcacct | ctcaagacgc | caagaatttg | 780 |
| accaatttaa | tgctgaatat | gatggcgggtg | tttgattcta | aatccttggga | agatgcggtt | 840 |
| aaaaacgctc | cctttcagtt | tagcgacaac | aacttgtcag | cgccatgtta | ttctaattat | 900 |
| tccacatgcg | tgaatcctta | caacgatggg | cttgttgatc | ctaaattgat | cgctaaaaat | 960 |
| aaaggagatg | aatacaatat | agaaaacggg | caaacaggct | cagtgatatt | aacgccgcaa | 1020 |
| gatgttatct | atagctatag | ggttacgaat | aatctttatg | tgaatctctt | acccccaa | 1080 |
| ggaggggatt | tagggctagg | gtctcaatat | ggcgcccca | atggtccagg | cgatgatggc | 1140 |
| accaattttg | gcgctttagg | gatattgtct | cctttcttag | accctgaaat | actgtttggc | 1200 |
| aaagaattga | ataaagtgcg | catcatgcaa | ttaagagaca | ttatccatga | atacgggcac | 1260 |
| acttttaggt | atacgcataa | tggaacatg | acttatcaaa | gggtgcgc | gtgtgaagaa | 1320 |
| aacaatgggc | cagaagagcg | ctgtaagggc | gggaaaatag | agcaagtggg | tgggcaagaa | 1380 |
| gtgcaagtag | ttgacaacgg | gcatgaagtg | cgagacaccg | atggctcttt | ctatgatgtg | 1440 |
| tggtctcggt | ttggcgccca | aaatcagccc | cgcttcccta | gcagttaccc | caattccatt | 1500 |
| tatactgatt | gctctcaagt | ccccgctggg | cttataggcg | ttactagcgc | ggtttgcaa | 1560 |
| caactcattg | atcaaaacgc | cctaccggtg | gattacacta | atgttagcag | ccaaaccaac | 1620 |
| tatttaaacg | ctagtttgaa | cacgcaagat | tttgcgacca | ctatgcttag | cgcgatcagt | 1680 |
| caaagccttt | catctactag | atctagcgcc | actacctatc | gcacttcaaa | aacctcacgg | 1740 |
| ccctttggag | ccccctattt | aggcggtaat | cttaaaatgg | gctatcaaaa | atactttaat | 1800 |
| gattacttag | ggttgtcttc | ttatggcatc | atcaaataca | actacgctca | agccaataac | 1860 |
| gaaaaaatcc | aacaatttaag | ctatggcgtg | ggaatggatg | tggtgtttga | ttttatcacc | 1920 |
| aattacacta | acgaaaaagaa | ccctaaaaaac | aatctaacca | agaaagtttt | cacttctctt | 1980 |
| cttgggggtg | ttgggggggt | aaggggctta | tacaattagct | attattttgtt | gaaccaatac | 2040 |
| aaagggagcg | gtaattttaa | tgtgaccggt | gggttgaatt | accgctacaa | gcattctaaa | 2100 |
| tattctgtag | gcattagcgt | tccttttagtc | cagttgaaat | ctagagtcgt | ttctagcgat | 2160 |
| ggcgcaacta | ccaatttctat | caccctgaat | gaagggggca | gccattttta | agtgtttttt | 2220 |
| aattacgggt | ggatttttc | | | | | 2238 |

Seq ID 118

| | | | | | | |
|-------------|------------|------------|------------|------------|------------|-----|
| atgaaaaaga | ttattcttgc | atgccttatg | gcttttgtgg | gtgccaattt | aagcgagag | 60 |
| cctaagtggt | atagcaaggc | ctacaacaaa | acaaacaccc | aaaaaggcta | tctttatggg | 120 |
| agtgggttcg | ccacttctaa | agaggcttct | aaacaaaaag | cgttagcgga | tttagtggcg | 180 |
| tcattatagcg | tggtggttaa | ttcccaaatc | catattcaaa | aaagtctgtg | ggacaataag | 240 |
| ttaaaatcca | gcgattcgca | aacgattaac | ttaaagaccg | atgacttgga | attgaataat | 300 |
| gtagaaattg | tcaatcaaga | agtgcacaaa | gggatctact | acaccagagt | aaggatcaat | 360 |
| caaaaacttg | ttttgcaggg | tttaagggat | aagtataacg | ctctttatgg | gcagttttcc | 420 |
| accttaatgc | ctaaggtttg | taaaggggtt | tttttacagc | aatccaagag | catgggggat | 480 |
| ttattggcta | aagcgatgcc | tatagaaagg | attttaaaag | cgtattctgt | tccggtgggt | 540 |
| tcgttagaaa | aattgaaaa | aatctattat | caaaacgctt | tcaaacctaa | agtgcacatc | 600 |
| acttttgata | acaacggcga | tgcggaatc | aaaagcgctc | tcataagcgc | ttatgccaga | 660 |
| gtgctaacc | ctagtgatga | agaaaaactc | tatcaaatca | aaaatgaagt | tttcacagac | 720 |
| agtgctaagt | gcatacgcg | cattagagtg | gttgtagcgc | cgagcgattg | tcaaggcacg | 780 |
| cctgtattga | atagaagcct | tgaagtggat | gaaaagaata | agaattttgc | tatcacgcgc | 840 |
| ttacaatctt | tgctttataa | agaactgaaa | gattatgcca | ataaagaagg | gcaaggcaat | 900 |
| acgggggtta | | | | | | 909 |

Seq ID 119

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atgaaagaga | ataaagcttt | tacgcatttg | cacttgcaca | cagaatattc | gcttttagac | 60 |
| ggggcgaaca | agattaaaat | tctagccaaa | cgcgttaaag | aattgggcat | gaaaagcgtg | 120 |
| agcgtaaactg | atcatgggaa | catgttttga | gcgattgatt | tttatacgag | catgaaaaaa | 180 |
| gaaggcatta | agcctatcat | cggcatggaa | gcgtatatcc | ataatgatga | caacctttct | 240 |
| agcaaagaaa | ccaagcagcg | tttccattta | tgcttgttcg | ctaaaaacca | agagggctat | 300 |
| gaaaatttga | tgttcttaag | ctctatggcg | tatttagagg | ggttttatta | tttcccacgc | 360 |
| atcaataaaa | agcttctaaa | agagcattct | aaaggcatta | tcgcttctag | cgcatgcttg | 420 |
| caaggggaag | tcattacca | tttgaatacc | aataatgaga | gaaaccgcaa | gtatggggct | 480 |
| aaaggctatg | atgaagctaa | aaaaatcgct | tgcaataacc | aagagatttt | tgaagacgat | 540 |
| ttttatttag | agatcatgcg | ccatggcatt | ttagatcagc | gattcattga | tgagcaagtc | 600 |
| attaaaatgt | ctttagaaac | agggttaaaa | atcattgccca | ccaacgacac | ccactacacc | 660 |
| atgcctaata | acgccaaggc | tcaagaagtg | gcgatgtgcg | tagcgatggg | taaaacccta | 720 |
| aacgataaag | ggcgcttgaa | acactccgtg | catgagtttt | acattaaatc | ccccgaagaa | 780 |
| atggcagaag | tccttgcaga | tattccagaa | gcttttagaaa | acaccaaga | aatcgctgat | 840 |
| aaatgcgttt | tagagattga | tttaaaagac | gataaaaaga | accccccaac | ccccccaagc | 900 |
| ttcaaattca | ctaaagctta | cgctcaaaat | gaggggctga | attttgaaga | tgacgcttct | 960 |
| tattttgcct | ataaggctag | agaaggcttg | aaagagcgct | tagtttttagt | accaaagaa | 1020 |
| aagcatgac | aataaaaga | gcgcctagaa | aaagaaattg | aagtcattac | gaacatgaaa | 1080 |
| ttcccagggt | atatgctgat | tggtgggat | tttatccgtt | atgctaagga | aatgggcatt | 1140 |
| cctgtagggc | ctggtagggg | gagtgcggcc | gggagcttgg | tggcttttgc | tttaaaatc | 1200 |
| acggatattg | accctttgaa | atacgatttg | ctctttgaaa | ggttttttaa | ccccgaaaga | 1260 |
| atcagcatgc | ctgatatgga | tacggatttt | tgccagcgcc | ggcgtaagga | aatcatagaa | 1320 |
| tacatgattg | aaaaatacgg | caaatacaat | gtggcacaa | tcatacattt | taataagatg | 1380 |
| ttggctaaag | cgctgatcag | agatgtcgca | agggttttgg | acatgcccta | taaagaagcc | 1440 |
| gatgattttg | ccaaactcat | acccaaccgc | ttaggcata | cgcttaaggg | ctatgaaaaa | 1500 |
| aatggcgagt | ttatcgaggg | agcgtgggaa | ttagagccta | aaatcaagga | attagtagag | 1560 |
| agtaataaat | tagccaaaca | agtgtgggag | tattcgctca | atthagagaa | tttaaacgcg | 1620 |
| aacgcaggcg | tgcatgccgc | agccttagtg | gtggatagcc | aaaaagagtt | gtggcacaaa | 1680 |
| acccttttgt | ttgcctctga | aaagaccggc | ggatcgcta | cgcaatattc | catgaagtat | 1740 |
| ttggagccgg | tggatttgat | caagtttgac | tttttggggc | ttaaaacctt | gaccgtgatt | 1800 |
| gatgatgcgc | ttaaaatcat | taaaacacaa | cacaaaatta | gcgtggattt | tttatcggtg | 1860 |
| gatatggacg | atccgaaagt | gtataaaacg | atccaaagcg | gggatacggg | ggggatcttc | 1920 |
| cagattgaat | ccgggatgtt | tcaaggcgct | aacagcgct | taaggccttc | aagctttgaa | 1980 |
| gacattatcg | ccattatcgc | ctaggcgaga | ccaggcgcta | tgggaatcagg | catggtagat | 2040 |
| gattttgtga | acagaaagca | tggcgcttgag | cctatcgctt | atgcgtttta | agaattagag | 2100 |
| ccgatttttaa | agcccactta | cggcacgatc | gtctatcaag | agcagggtgat | gcaaactcgtg | 2160 |
| caaactatcg | gcggtttcag | tttgggtgaa | gcggatctca | tccgccgcgc | tatggggaaa | 2220 |
| aaagacgctc | agatcatggc | ggacaataag | gctaagtttg | tagaaggcgc | taaaaattta | 2280 |
| ggcatgatg | gccaaaaggc | ggctaatttg | tgggatttga | tcggttaaat | tgccggctat | 2340 |
| ggtttcaaca | aatcgcatte | ggccgcttat | gcgatgatca | ctttccaaac | ggcgtattta | 2400 |
| aagacttatt | acaagcatga | gttcatggca | gcgatgctca | ctagcgaatc | caataagatt | 2460 |
| gaatccgtgg | cgcgctatat | tgatgaggtc | agggcttttag | aaattgaagt | gatgcctccg | 2520 |
| catatcaatt | cttctatgca | agattttcagc | gtggcgaggt | ttaaaaatca | aaagggcgag | 2580 |
| ttagaaaaag | aaaatcggtt | tgggttggga | gcgattaaag | gagttggggg | tgagccgatt | 2640 |
| aaaaacatca | ttgaagaaag | ggctaagggg | gattataaga | gtttggaaga | ttttatttca | 2700 |
| cgggttgatt | tttctaaact | cactaaaaaa | tcttttagagc | cattagtga | atcagggagc | 2760 |
| ttggataaatt | taggctacac | tagaaaaacc | atgctcgcta | acttggatct | gatctgtgat | 2820 |
| gccggggcgc | ctaaagacaa | ggctaatagaa | atgatgcaag | ggggtaattc | tctttttgga | 2880 |
| cccatggagg | gcggaaccac | agagcagggt | gttttggaca | tgattgattt | gggcgaacat | 2940 |
| gacgctaaaa | cgctttttaga | atgcgaatac | gaaacttttag | gcacccatgt | ttcaggcaac | 3000 |
| ccttttagacg | agtttaaaaga | agaaattaag | ggtttttaaaa | atttagtcaa | aagcattgat | 3060 |
| attgaagagt | tagaaatcgg | ctcgcaagct | tatttgctcg | gtaaaatcat | ggaagttaa | 3120 |
| aagaaaaattg | gcaaacgaag | cggttaagcct | tatggcatag | cggacatttt | ggatcgatac | 3180 |
| ggcaagtttg | aactcatgct | ttttgaaaag | caattaaacg | ccttagaaga | gttggacatt | 3240 |
| aataagcctt | tagtggttcaa | atgcaagatt | gaagagcaag | aagaagtggg | gcgattgagg | 3300 |
| ctttttgaaa | tcttggtatct | agagagcgct | agagaggtta | aaatccctaa | agcccgttat | 3360 |
| aaagaccctg | aaaagcaaaa | agaagaggtg | cgcgaaatcc | cccccatgga | aatgcttgcc | 3420 |
| tctagttctt | gctcttttagc | gatcgtgtta | gaaaacgatg | tgaaaaaaga | gttttttaaga | 3480 |
| caaatcaaa | agagcgcttt | aaaacaccag | ggcaaacgcc | ccttgatttt | gatcatcaaa | 3540 |
| gataaggata | agcaattcaa | aatccaaagc | gatttaattg | taaatgaaaa | gattaaggac | 3600 |
| gatttttaaa | ggtttagagt | gagggattta | gct | | | 3633 |

Seq ID 120

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| atgacgcttt | tagtaggttt | aggcaaccct | actttgcgtt | acgctcacac | cagacacaac | 60 |
| gctggttttg | atattttaga | ttcactcggt | agcgaattgg | atctttcttt | cactttttct | 120 |
| cccaaacaca | acgctttttt | atgcgtttat | aaggatttta | tcttcctaaa | gccacaaact | 180 |

| | | | | | | |
|------------|------------|-------------|------------|------------|------------|-----|
| tacatgaatt | taagcggcga | gagcgtttta | agcgtataaa | atttttacaa | aaccaaagag | 240 |
| cttttaattg | tccatgacga | cttggattta | cctttgggcg | ttgtgaggtt | taaaaatggt | 300 |
| ggggggaatg | gagggcataa | tggcttaaaa | tccattgatt | tgttggtgtc | taattcttat | 360 |
| tatcgcttga | gggtggggat | ttctaaagga | ataggcgtaa | ttgagcatgt | gctttcaaaa | 420 |
| ttccacaaaa | acgaagagcc | tttaaaaaac | gctgcgtttg | aacatgccaa | aaacgcctta | 480 |
| aaatttttta | tagaaagcca | tgatttttaac | gctatgcaaa | atcgtttcac | gcttaaaaaa | 540 |
| cctttaaaaa | tagaaagt | | | | | 558 |

Seq ID 121

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|------------|------|
| atgaaaaaat | ccctttgtct | gtcttttctt | ctgactttct | ctaaccctct | tcaagccctt | 60 |
| gtgatcgagc | ttttagaaga | aatcaaaact | tgcgcgcata | aaggcacttt | taaggctaaa | 120 |
| gtccttgatt | ctaaaaaac | aagacaagtt | ttaggcggtt | ataatatctc | cccacacaaa | 180 |
| aaactcacgc | tactatcac | ccacatatcc | actgcaatcg | tctatcaacc | ccttgatgaa | 240 |
| aaacttttct | tagaaacaac | cttaaaacct | aaccgcctta | ctatccctag | aaacaccag | 300 |
| attgtttttt | cttcaaaaaga | attgaaagag | tgcgaccgcg | accaaagtc | ttcttttaac | 360 |
| gcgcccctgc | aaaaaccaca | aaacaaaccc | cattcatcgc | aacaaccttc | tcaaaacttt | 420 |
| tottaccag | agcccaaac | aggctctaaa | aactctaaaa | acagcctttt | acagccttta | 480 |
| gcaattccta | gcaaaataag | tcccactaac | gaaactcaaa | cgccaacaaa | cgacactaaa | 540 |
| ccccctttta | agcattcttc | agaagatcaa | gaaagcaacc | tctttataac | gccaccctac | 600 |
| gaaaaaacgc | tccttaacaa | cacctctaac | gctgatatta | gtgaaaacaa | tgaagcgaat | 660 |
| gagaataaag | ataatgtgga | aaaacaagcc | attagagatg | ctaataattaa | agaatttgca | 720 |
| tgcggggaagt | gggtctatga | cgatgaaat | ttacaagcct | accgccaag | cattttaaaa | 780 |
| cgcggtgatg | aagacaaaca | aactgcaaca | gatattacc | cttgcgatta | cagcaccgct | 840 |
| gaaaataaaa | gcggtaaaaat | cattaccccc | tatactaaaa | tctccgttca | taaaacagag | 900 |
| ccttttagaag | agccacaaa | ttttgaagct | aaaaataatt | tgcctattct | tcaagccaga | 960 |
| agctctacag | aaaaatgcaa | aagggtctaga | gcaagaaaag | acggcacgac | taggcaatgc | 1020 |
| tatctaatag | aagagccttt | aaaacaagca | tgaggagagtg | agtatgaaat | caccacgcaa | 1080 |
| ttagtgaag | ccatttatga | gcgccccaaa | caagacgatc | aagtagagcc | gactttttat | 1140 |
| gaaaccagcg | aattggctta | ttcttccaca | cgaaaaagcg | aaataacgca | caatgaattg | 1200 |
| aatttgaaatg | aaaaattcat | ggaatttggtg | gaagtgtatg | aggggcatta | tttaaacgat | 1260 |
| ataaataaag | agagcagtga | atataaagaa | tgggttaaaa | accatgtgcg | ctttaaagaa | 1320 |
| ggggtgtgca | tggctttaga | aatagaagaa | cagccacgag | ctaaaagcac | gcctttgagt | 1380 |
| attgaaaact | ctcgtgtggt | atgtgtcaaa | aagggggaatt | atttattcaa | cgaagtt | 1437 |

Seq ID 122

| | | | | | | |
|-------------|-------------|------------|------------|------------|-------------|-----|
| atgaatgcatt | tcaagcgtat | tattagtgtg | ggggtaattg | ctttaggttt | gtttaacctt | 60 |
| ttagacgcca | aaccaccaca | agagaaaaaa | gaaaaccaca | aaatcactcg | tgagcttaaa | 120 |
| gtgggcgcta | accccggtcc | gcattgcgca | atcttgcaat | cagtcgtgga | cgatttgaaa | 180 |
| gagaaagggg | tcaaatagat | gatcgtatct | tttacggatt | atgtgttgcc | taatttagcg | 240 |
| ctcaatgacg | gctctttgga | tgccaattac | ttccagcacc | gcccttattt | ggatcggttt | 300 |
| aatttggaca | ggaaaaatgca | ccttggttgg | ttggccaata | tccatgtgga | gccttttaaga | 360 |
| ttttattctc | aaaaaatcac | agatattaaa | aatcttaaaa | agggttcagt | gattgctgtg | 420 |
| ccaaatgatc | cgcccaatca | aggtagggcg | ttgattttac | tccataaaca | aggccttatc | 480 |
| gccctcaaa | acccaagcaa | tctatacgct | acggagtttg | atattgtcaa | aaatccttac | 540 |
| aatatcaaaa | tcaagccttt | agaagccgcg | ttattgccta | aggttttagg | ggatgtggat | 600 |
| ggggctatca | taacagggaa | ttatgccttg | caagcaaaac | tcaccggagc | tttattttca | 660 |
| gaagataaag | actcgcctta | tgccaatcta | atagccgctc | gtgaggataa | cgcgcaagat | 720 |
| gaagccataa | aaacattgat | tgaagcctta | caaagtgaat | agaccaggaa | attcattttg | 780 |
| gatacctata | agggggcgat | tatcccggtt | ttt | | | 813 |

Seq ID 123

| | | | | | | |
|-------------|-------------|-------------|------------|-------------|-------------|------|
| atgaaaaatc | ttcgctataa | gcttttgcgc | tttgttttta | tagggttttg | ggggttacta | 60 |
| gccttaaat | tatttatatt | aagcggttaa | aatcaagaat | actatgaaaa | attggctgaa | 120 |
| cgaaacatga | ctaaaaagga | atttctagtc | cctacaaggg | gaaatattac | agacagaaat | 180 |
| gatgagtttt | tggccactaa | tgaattgggtg | tttgccgtgt | ttttgccag | cggactgaaa | 240 |
| caaaaagatc | ttttagaaaa | aattgaaatc | attccaaaag | ttttccctaa | cttttctaaa | 300 |
| gaaacgcttt | taaaacaatta | ccaaaaagaa | aattcgcttt | ataaccataa | cctcattaaa | 360 |
| gtgggttggt | tcattcctta | tgccaccatg | caacctcttt | atgccaaaact | catccaaaact | 420 |
| caaggcattt | ttgcgcttcc | cttagacaag | cgttactacc | ctaataacgc | tttagcttcg | 480 |
| catgttttag | gctatgtggg | ggtggcaagc | ttgcaagatt | taaaagacga | tgaggagaat | 540 |
| caatacagcc | agattgtagg | caaaacggcg | attgaaaaag | aatacaacaa | gcttttacaa | 600 |
| ggcaaggtgg | gttataaaat | catgcgtgtc | aatgcgctca | atcaagaatt | agccacctta | 660 |
| gaagtagtgc | tgccaagcac | caacaaccac | ttgcaattga | gttttagacaa | acgcttgcaa | 720 |
| aaagaagcgg | acaagctctt | tgaaaaataa | aggggggcta | tttttagtgat | ggatgcagaa | 780 |
| aatgggggaat | tgctcggttc | aggaagttac | cctgaataca | atttgaaaga | ttttgtagcc | 840 |
| gggatacgtc | aagacaaatg | gcaaaaactt | caagatgata | tttataaccc | cttattaaac | 900 |
| cgcttcgcta | acgccttgta | tccgcccggg | tctgtgtgta | aaatgggctg | gggcttgagc | 960 |
| tttttagaaa | accttcatat | cacagaaaac | accaccatac | ccaccccgcc | ttttattgaa | 1020 |

| | | | | | | |
|------------|-------------|------------|------------|------------|------------|------|
| gtgggcaagc | acaaattcag | agactggaaa | aaaacagggc | atggcaattc | taatttgtat | 1080 |
| aaagccatta | gggagtcctg | ggatgtgtat | ttttataagt | ttgggcttga | aatctctata | 1140 |
| gaaaaactct | ctaaaacctt | aagggaagtg | ggctttgggg | aaaaaacggg | cgttgatttg | 1200 |
| ccgaatgaat | ttgtggggat | tgtgccggat | aatttgtgga | aactcaaacg | cttcaatcaa | 1260 |
| gactggcgcg | ttggggacac | gctcattacc | gctattgggc | aaggctcttt | tttagccacg | 1320 |
| cccttgacgg | ttctagccta | cacgggactc | attgctacgg | gcaaactggc | aacgcctcat | 1380 |
| ttcgctatca | acaacaaaca | accgcttaaa | gatcccttaa | atagctttca | aaaaaagaag | 1440 |
| ctccaagcct | tgagagtggg | catgtatgaa | gtgtgtaaac | ataaagacgg | caccgcttat | 1500 |
| cattccacaa | ggggttctaa | gattacttta | gcgtgtaaaa | cgggcaccgc | acaagtcgtg | 1560 |
| gaaatcgctc | aaaacatcgt | caatcgcatg | aaagaaaagg | atatggaata | tttccatcga | 1620 |
| tcccatcgct | ggattaccgc | atttttgctt | tatgaaaaac | ccaaatacgc | tatcactatt | 1680 |
| ttagtagaac | atgggggaagg | ggggtcaaaa | ctagggggcc | tgtagtgaa | gatgagtaat | 1740 |
| aaactctatg | agcttggtta | tctt | | | | 1764 |

Seq ID 124

| | | | | | | |
|------------|-------------|-------------|-------------|------------|------------|-----|
| atgttcagcg | gtctaatacca | tcaaataagct | aaagtgaana | gtttccacaa | caatatttta | 60 |
| aacatagaga | gtgatctcaa | tcccaagctt | ggcgatagca | ttgcgattaa | tggggcatgt | 120 |
| ttgaccgcca | tagaaagtcc | aaaaacgcct | tttagcgtgg | aattgagcca | aaaaacccaa | 180 |
| aacagcgtag | cgttagaaaa | ttacaaggat | ttagtccata | ttgagccagc | cctaaaagct | 240 |
| gatgcgagtt | tggatgggca | ttttgtgcaa | gggcatattg | acgctatagg | ggtcattgaa | 300 |
| aaaatcattc | acaacgctaa | tcaagtggat | tttttcatca | gcgcttctga | agaaacgctt | 360 |
| ttattgtgcg | ttgagcaagg | ctctattgca | gttgatgggg | tgagtttgac | tttaagcaag | 420 |
| gtagaagaaa | aggggttttg | gctaacgatt | atcccttaca | ctttagaaaa | cacccttttt | 480 |
| aaggcttata | aactcaaacg | gcgcgtgaat | attgaaacgg | acatgttagt | ccgcagcgtt | 540 |
| gcgtctatct | tgaaaaaaac | aaaagggttt | gaaaaaaaatt | tctcttgga | tgaggctgac | 600 |
| gctttgactt | taggggtat | | | | | 618 |

Seq ID 125

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| aaaaagagcg | aacgctttta | aattgaactt | aagccattta | aaaaaaggcc | aatcgtgggt | 60 |
| gcgcataagc | gagcgttatt | tcaggcctac | cgaagtggat | ttgcttttag | gcgatccac | 120 |

Seq ID 126

| | | | | | | |
|------------|------------|------------|------------|------------|---|----|
| tggttcgcca | aaaaagattt | tagcgccttg | agcgcaacaa | aaagggcatt | t | 51 |
|------------|------------|------------|------------|------------|---|----|

Seq ID 127

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|-----|
| aacctgcaaa | cccaccttaa | aaggctcaaa | agaagtgagt | ttgtggggcca | aaaaggaatt | 60 |
| agagggcatg | gggaggtttt | ctttaaaaga | aattttaatg | ctcagcctta | ccttattggc | 120 |
| tttactgggt | tggatttttg | gcaaaccctt | aggcttgcat | gcgagtgcga | cggctttgat | 180 |
| tgatcatggt | ttaatggcgt | tttg | | | | 204 |

Seq ID 128

| | | | | | | |
|------------|------------|------------|------------|-------------|------------|----|
| acacaagcca | ttattttgaa | aaaaaaccag | gcttggggga | gaggggtggat | tatgcggggc | 60 |
| gttgcttcta | taataaattc | cagagag | | | | 87 |

Seq ID 129

| | | | | | | |
|------------|------------|------------|------------|------------|------------|-----|
| gccatgtgga | tattactaaa | aacaagcaag | actcgcaact | caaaaaagat | tgtttggaa | 60 |
| ttatccaaag | gtttaatgtc | ccaaagccca | ttatcattac | cgtctcttat | aaccttaggg | 120 |
| gcattaagcc | cactaaaaaa | gaag | | | | 144 |

Seq ID 130

| | | | | | | |
|------------|------------|------------|------------|-----------|------------|----|
| aaaaagaaga | aaagcaaaaa | ttccaaaaat | tcgcctctgg | cttggaatg | tctttcaatg | 60 |
| tgtggcggt | | | | | | 69 |

Seq ID 131

| | | | | | | |
|-------------|------------|------------|------------|-------------|------------|----|
| aaaaagctta | taaaaagcct | agcattaaag | aaagacaccg | ccatcggttat | gaaatcaacc | 60 |
| cctaataaccg | ccaagagtgg | gaaaataagg | gct | | | 93 |

Seq ID 132

| | | | | | | |
|------------|------------|------------|------------|------------|------------|----|
| aggggcgcta | cacccccacg | caaaaaaaca | ttatttttga | aaaaaccgag | cgttttatca | 60 |
| cgcccaaact | cc | | | | | 72 |

Seq ID 133

| | | | | | | |
|------------|------------|------------|------------|------------|------|----|
| tcggctcaac | caccatcgct | aaaacggagc | ttaggggggt | tgaaagccat | ggca | 54 |
|------------|------------|------------|------------|------------|------|----|

Seq ID 134

| | | | | | | |
|------------|------------|------------|------------|----|--|----|
| aaacatgatc | acggcctttg | ggcgccgcat | tcaagagagt | tt | | 42 |
|------------|------------|------------|------------|----|--|----|

Seq ID 135

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|-------------|-----|
| gccaaaaata | cggttttaaa | atcccttget | ttgggcatac | gggcgatggc | aatgtgcatg | 60 |
| Seq ID 136 | | | | | | |
| cgctttgaaa | gacaaaacct | atctctacgc | tatggatcta | ttggattaca | acaactat | 60 |
| atccatagaa | aaccccat | tcaaaacaag | agcaatggga | acttatgcgg | atttgattat | 120 |
| catcacaggc | tcattagagc | aagtcaatgg | gtattacaac | attctaaaag | cgctcaacaa | 180 |
| acgcaacgc | | | | | | 189 |
| Seq ID 137 | | | | | | |
| tcgtcagttt | catcaaaaaa | gccagccaaa | aattccctaa | ctcgcttttt | atcatcacag | 60 |
| gggatcattt | tgacaggagc | tatgaatacg | ctaaaaacga | tttgatatc | attaaatccg | 120 |
| tgccgcttat | tttatatgcc | cctactt | | | | 147 |
| Seq ID 138 | | | | | | |
| aagtggaaaca | tttctacccc | aaaaccccca | cccaagaatg | gcgcgatagg | gtgggggatt | 60 |
| atctcacttt | tgagcaagac | tatcttaata | atcttgggaa | tc | | 102 |
| Seq ID 139 | | | | | | |
| aaaacgcgat | ggataccaac | agagaagtgg | cgcaattcca | ctatggaggc | ggcacgccga | 60 |
| cctttttttc | gcccattcaa | t | | | | 81 |
| Seq ID 140 | | | | | | |
| aaaaactttc | gtgctcatga | cttttttgag | cgcagggtt | gtcaatattt | ttattccgtc | 60 |
| tggcggaggg | caatggggcg | ttcaagctcc | tatcatgctt | cggctggggc | aaagcttagg | 120 |
| ggtggatccg | ggagtgggtt | ctatggctat | cgcttgggga | gatgcttggg | cgaatatgat | 180 |
| acagcctttt | tgggctttgc | ccgcttttagc | cattgcgggt | ttgggcgc | | 228 |
| Seq ID 141 | | | | | | |
| aaggcccggt | taaaacgctt | tcagattatt | ccacttatat | cagccgaaaa | agcaatgtta | 60 |
| caggcgatgc | gt | | | | | 72 |
| Seq ID 142 | | | | | | |
| cgggcaccat | ttagacggga | gccttggagg | ttgggggggt | gctgtaattt | a | 51 |
| Seq ID 143 | | | | | | |
| tttacaaggc | ataaacaaac | aagccgctca | aaaagaagca | aaagccttag | cgttaaaaat | 60 |
| ggggttaga | | | | | | 69 |
| Seq ID 144 | | | | | | |
| ttcttcagtt | acattcaata | tgaaaggcgc | tctagtggct | atcaccgagc | ttggcccttc | 60 |
| tttagggagc | gttttgac | | | | | 78 |
| Seq ID 145 | | | | | | |
| agggatttac | ttgcaatacc | gcagcgtttt | gcgcgaaaaac | aggcttttaa | aaaaccatct | 60 |
| ctc | | | | | | 63 |
| Seq ID 146 | | | | | | |
| aaatcgccca | aaaaggcaac | aaaaaagagg | ttt | | | 33 |
| Seq ID 147 | | | | | | |
| gcgcttgagc | agcgtgatga | aagatttacc | cgtgggggt | | | 39 |
| Seq ID 148 | | | | | | |
| cccatatctt | gcaaagcccc | taaattcgtg | gtgagtttgt | gcaattctgg | catgcccgtta | 60 |
| gacttaggcc | cttggaaggg | caagaccgcc | acaaagtccc | tttctaattc | tttattttta | 120 |
| aagcgttcta | aaaactcgtc | ttgggtttta | aaaacaatcg | ctctagcctt | aactttccta | 180 |
| tgctcatctt | taatggctga | gattttaatc | acggccctcc | ctaaattacc | ctttaaaatt | 240 |
| ttaagcccc | cattagcggc | aaaaggatca | ctaacagggc | gtaaaatatc | cgtattcagg | 300 |
| cta | | | | | | 303 |
| Seq ID 149 | | | | | | |
| aagagcatca | catcacgcca | agctataaaa | ccgatattga | gagcg | | 45 |
| Seq ID 150 | | | | | | |
| tttaaaaccc | ttgttgagct | ttttaaaagc | caaataccag | gtgccttttag | aaaacattcg | 60 |
| catccaagac | actcaaattt | tagcgttttt | aaaaaatccg | gaaaaagtgg | ggtt | 114 |
| Seq ID 151 | | | | | | |

| | |
|---|-----|
| aacgctatta tgaagccaaa gaaaccgcaa tatttaaaaa attccctaaa ttcacccaac | 60 |
| tttatgataa cgccacttct aaaatccaag cct | 93 |
| Seq ID 152 | |
| ataaaagccc taaaaccaag cttgtttgag cgtctaaatt ctctaaac | 48 |
| Seq ID 153 | |
| gcgatgctgt ttttttagatt cgttacgggt tctcccacat acgcgcagcc ggctcccca | 60 |
| gtgttagaag taaccgtgcc agatggcggt ccacggagat tgccgtcgct acccttttca | 120 |
| tggcatactc ctaagaggtc tttcacgaac gctgcagggg ttctttcaaa gtccttcacc | 180 |
| actgct | 186 |
| Seq ID 154 | |
| gggctttttc aaaatctaac gcccactca aagacaccgc gctcacttcg ccgagcgaat | 60 |
| gccctaaagc aaaaaacgggt tttaaccccc catttacttg cttgt | 105 |
| Seq ID 155 | |
| tttggtggac cccaagaggt gccaccgatc gcaacgcca agaaaaacc aaatgcaag | 60 |
| ttctcacgat tgaaaatagc cgggttaaac aacacatctg tgccagccc a | 111 |
| Seq ID 156 | |
| ataagagcgt ttttcaaagg tgtaaatctt gccaatttca ttgactatgg gcgtgatagc | 60 |
| cgcatttttg ggagcgtatga tttcataagc ggtgttagtg gtatgtgtga atttgcattgc | 120 |
| aaaaaaacgc ccgtcttcgg ttatttcgcc attgacttga aaatcccctt cgctaattggc | 180 |
| tggttggtgg ttttgagtat ccaacctttc aaaaggcctt cgcatacaat agccgtccgt | 240 |
| aaaacccctg tttttaagcg tgttcaattc gctggcataa aaactcggct t | 291 |
| Seq ID 157 | |
| aagttcttta gcaatcactt gagaagaaag gtcgttttta tagatataag tttgcatgtc | 60 |
| aatgcttttt tggctcattc taataagtcc cactctatgc aacagagcgt caaagccatc | 120 |
| ttc | 123 |
| Seq ID 158 | |
| tccgtagggg tgaaaaaatc gcctccaaac tccacttcg ca | 42 |
| Seq ID 159 | |
| accctaactt gcaaaaaagt cgcttctaaa agggctttga tttgcgcatt gatttcgctc | 60 |
| acgtcaata catccaccag ctcccccttt tatagcaaac gagtgcagatc attgaaaagc | 120 |
| ctaaaaaca tgataaaaac caaaaacccc acccccgcta gccacaacgc attttgtatg | 180 |
| ggtgttgga aagtata | 198 |
| Seq ID 160 | |
| gcgtcaatga gtttgtctaa tcctgtgccc ctaggcacgc ccgcgggttac gcctacgatt | 60 |
| ttttcatctt ttttagctaa ttctaaaagg gtgttagaat acgcttcagt gggcgataag | 120 |
| attgcgcttt tggatttttt agacaagccg gtatccaaat caaaaggccc caccatgc | 180 |
| catttttca | 189 |
| Seq ID 161 | |
| atctttttga gcaacacctc tctttgcatg gggcggacaa attgcaacac aaaaagcaat | 60 |
| gaaaaacgcgc tcgcttcttt aaactcaacc tctaaaaaat ccatgcattc aaaacgggca | 120 |
| ttgttaaaat cttttaattt ttcttgcgct tttttgagca tgggcattgga attatcaatc | 180 |
| cctacaagct caatctcttg ttggatttgt cggttaagcg cgataaaaaa gttcccggtg | 240 |
| gaacagccca aatca | 255 |
| Seq ID 162 | |
| agggattttc aagtccttaa acatcgcttg caccctttct ttttcatttt tacgcaacaa | 60 |
| gccatgatcc acaaaaaacag cgatcaaat atccttaatg gctctgtgca acagcgtagc | 120 |
| gaccaccgta gaatccacgc cccactcac cgcgcacaaa accttagcgt tagcgatttt | 180 |
| ttctttcaat cgtgcgattt ctctttgagc gaaatgctgc atcccccaag ttttttcaca | 240 |
| gccgcaaac | 249 |
| Seq ID 163 | |
| attatccaca tgagggggcga ccactctcat cacatgccct ctttttttca gcgcttcaaa | 60 |
| aaaacgaaac gctgtcatag aagtgcatt actggtgtct ttaaaactat ccacgac | 117 |
| Seq ID 164 | |
| atcattatcc cggctgtgct cgccaatgac catgcccaca taaaccttcg tttgggggtt | 60 |
| gataaaaaagc gtgcctcttt cttggatatt gaaaaggga aaagcggctg cttcgccatt | 120 |

| | |
|--|-----|
| ttccatgctg at | 132 |
| Seq ID 165 | |
| aaaaaccgcc cttctaaaaa cccgctcgcg caaaacgcgc tagtgagcgc gttagctccg | 60 |
| ggcaaaacat cgtat | 75 |
| Seq ID 166 | |
| aaaccctcta gcgtttggat ctataaacca ataataaggcg gcaaaaatat tcaaaccata | 60 |
| ccttcc | 66 |
| Seq ID 167 | |
| tcgtcagttt catcaaaaaa gccagccaaa aattccctaa ctcgcttttt atcatcacag | 60 |
| gggatcattt tgacaggagc tatgaatacg ctaaaaacga tttgtatatc attaatccg | 120 |
| tgccgcttat tttatatgcc cctactt | 147 |
| Seq ID 168 | |
| cgcgctcgct cgcgctctct tttaggattt tttcttttga aagcgagttg caaaacaccg | 60 |
| cataagagcc taaattttca tctttccaat tcaaacacagg gtaagtggcg cataaatct | 120 |
| ttttggaaa | 129 |
| Seq ID 169 | |
| gtttcagaaa tcttatccac gctcgttagc ccatcaaaac tccctgagga accaaaggct | 60 |
| aaattgatgc gttggggggc atcagcgcca tttttagggt caaattgcaa aagaggcggg | 120 |
| ttcatgcctg caagcgatcc gtcgttatta aaatgcaaac ggcctccttc aaacacatta | 180 |
| ggcctagccg ctgaccccc tactaattcc ccaggctcag gcacgatcac cctaaaattc | 240 |
| cattccgctc cccactcct a | 261 |
| Seq ID 170 | |
| ctgcctaacc ttaacaaaat cagttcatca tctttcacta aatacacaag caaaacatca | 60 |
| ggcttaatgt ggcattccct aaaagggttc cactttccct ttaaggca | 108 |
| Seq ID 171 | |
| tcaaggttta gggagcgtgt tgccgccttc tttacaaaac gcgctcaaag aaaacgattt | 60 |
| aggcactctt ttatcgcc | 78 |
| Seq ID 172 | |
| aatattcatt ggccacacgc accaaatcgc tcacttttaa atccaaaaat tgcgctgggt | 60 |
| aatccgtcaa gccttgaata tcgttttgca ctaaatagtc cgcaaaaagc cccgcaacat | 120 |
| cgc | 123 |
| Seq ID 173 | |
| cccatacttt gcaaagcccc taaattcgct gtgagtttgt gcaattctgg catgccgtta | 60 |
| gacttaggcc cttggaaagg caagaccgcc acaaagtcct tttctaattc tttattttta | 120 |
| aagcgttcta aaaactcgct ttgggtttta aaaacaatcg ctctagcctt aactttccta | 180 |
| tgctcatctt taatggctga gattttaatc acggccctcc cttaaattacc ctttaaaatt | 240 |
| ttaagccccc cattagcggc aaaaggatca ctaacagggc gtaaaatatc cgtattcagg | 300 |
| cta | 303 |
| Seq ID 174 | |
| gaatctttag tcctaaaacc tatttttaggc aaacggcggt gtaagggttg ttgcctcct | 60 |
| tcaaagcctc ttttagcctt a | 81 |
| Seq ID 175 | |
| ggttcaaatt agcgatecga taaggagcga ttaagtattc aaaccatag aattgcttca | 60 |
| agagattttg atatttgcct tctt | 84 |
| Seq ID 176 | |
| ctagggggca ataaatcttt cacgctatac tcccaccaca catcacagcc ttttttctca | 60 |
| aaaagatttg ccacatgctc taaaacttcg ctttcaaaac aaggcttatt cgtgcgtttg | 120 |
| tctatgaaaa aggccagtgg cacgccccat tttctttgcc ggctcaagca ccaatcaggg | 180 |
| cggttttcta tcatggtttt taggcgggtt ttcccgtgc ttggcacaata ttccaccttt | 240 |
| tcaatcgcat ctaaagccac ttctcttaag gttttt | 276 |
| Seq ID 177 | |
| gcgttcgtgc ttaagccttg taaaaagcc tgctcttgga gttttaagtt ttccttggct | 60 |
| aattccacgc tagaaagcaa gcttttgtat tctttcaaa | 99 |
| Seq ID 178 | |

gagagcatct cttctctgat cctgtcaaaa ataatgatcg tatcattaat ggaataccca 60
 atcaagggtga gcaaggccgc aatcacttcc aaattcatat caatcttaaa aacaatcacc 120
 gagcttgcca ctaaaatcac atcatgcaca agcgcaatga cgctcgctaa agcaaaacgc 180
 cattca 186

Seq ID 179

MVKNTGELKKLSDTYENLSNLLTNFNMLNQAFTNASSPSEINATIDNLKANTQGLIGKTNSPAYQAVYLALNAAV
 GLWNVIAYNVQCGPGKSGDQSVIFDQPGHDSRSINCNLGTGYNNGVSGPLSIDNFKTLNQAYQTIQALKQDSGFP
 VLDSKKGQVTIKITTTQTNANKSETTTTTTTTNDQAQTLQEBASKMISVLTNCPWVNTAHNSNGGAPWNLTGTV
 CQVFATEFSAVTSMIKNAQEIQTQAQSLNNPQSNQNAFKDFNPYTSADRAFAQNMNLNHAQAQAKMLELADQMKDL
 NTIPKQFITNYLAACRNGGGTLPDAGVTSNTWGAGCAYVEETITALNNSLAHFGTQADQIKQSELLARTILDFRGS
 LKDLNNTYNSITTTASNTPNPFLKNLISQSTNPNNGGLQAVYQVNSAYSQLLSATQELGHNPFRRVGLISSQT
 NNGAMNGIGVQIGYKQFFGEKRRWGLRYYGFFDYNHAYIKSSFFNSASDVFTYGVGTDVLYNFINDKATKNNKISF
 GVFGGIALAGTSWLNSQYVNLATFNNFYSAKMNVANFQFLFNLGLRMNLAKNKKKASDHVAHQHVELGVKIPTINT
 NYYSLLGTQLQYRRLYSVYLNYPAY

Seq ID 180

MAKEIKFSDSARNLLFEGVRQLHDAVKVTMGPRGRNVLIQKSYGAPSITKDGVSVAKEIELSCPVANMGAQLVKEV
 ASKTADAAGDGTATVLAISIFKEGLRNITAGANPIEVKRGMDKAAEAIINELKKASKKVGGKEITQVATISAN
 SDHNIGKLIADAMEKVGKDGVITVEAKGIEDELDDVEGMQFDRGYLSPYFVINAEMKTAQLDNAYILLTDKISS
 MKDILPLLEKTMKEGKPLLI AEDIEGEALTTLVNVKLRGVLNIAAVKAPGFGDRRKEMLKDIAILTGGQVISEEL
 GLSLENAEVEFLGKAGRIVIDKONTTIVDGKGHSHDVDRVAQIKTQIASTTSYDKEKLQERLAKLSGGVAVIKV
 GAASEVEMKEKKDRVDDALSATKAAVEEGIVIGGGAALIRAAQKVHLNLHDDKEKVGYEIIMRAIKAPLAQIAINAG
 YDGGVVVNEVEKHEGHFGFNASNGKYVDMFKEGIIDPLKVERIALQNAVSVSSLLLTTEATVHEIKEEKAAPAMPD
 MGGMGGMGGMGGMM

Seq ID 181

MKIKNILLSGGSGKRLWPLSRSLYPKQFLKLFDHKSLFELSFKRNASLVDETLIVCNEKHYFLALEEIKNEIKNKS
 VGFLLESLSKNTANALALMSDKEDLLIVTPSDHLIKDLQAYENAIKKAIDLAQKGLVTFGVSIDKPNTFEFGY
 IESPNGLDVKRFIEKPSLDKAIEFQKSGGFYFNSGMFVFQAGVFLDELKHAFTILKGCERAFESLENAYFFFEKKI
 ARLSEKSMQDLEDMSIDIALMQQSHKIKMVELNAKWSDLGNFALFEEAANEPKENVSLNQTVPFAKESENNLFVS
 HKVSALLGVENLAVIDTKDALLIAHKDAKDLKALVNEVETNNQELLQTHTKVYRPGWSYEVLEHESGCVKVKILEV
 KPNARLSLQKHFRSEHVVVISGMASVELDHQLFELQANESTYIPKNTLHRLANYGKIPLIIIEVQVGEYVGEDDI
 VRIDDDFNRRQNQA

Seq ID 182

MAEWKTDTEEVKEVVKKCREFKRSLQEEKSPFIKDLDYSYALKIIVERRKIEHQLEAIEKLRRAKKKRSSFWGSF
 VEGARDLLDMVREIIPPAKLGAACDKVLNLMEDNIEKWEHNVRLRLERMLEIYATQAKASAELEVEGAWKSVKKSLD
 FYTDKHQEFIKRLNYASEAIDNEYNIAPPEILNESDFESTIVYNPKKSVYDEHLKDLREDFVSFLYADLKNRINA
 SSKLDRTTTTSKEQEFKNLEDLMPGFRGGTDTLSGDELEHMASFRGQEFKNLEDLMPSSLGVHSDYDESINLAKKN
 CVKNCKKALGDFTTEKIKESPNDLNAINAEAFNHLETELERATENLSQKIAPILERYENDKRQKLGYGEFLEKEKEGF
 MVDEQNPYPPEEVRFNELRLAEFESVFSIVPLEDLDPACAHALKALEATLKNRDLGFDATLEQIAKGFIPKGY
 LWHFDANVLGNVALVREELLGVKHTKGYLLWKQLQTQV

Seq ID 183

MNTYAQESKRLRLTKIGADGRCVIEDNFFTPPFKLMAPPYKDDLAIEIMLLAVSPGMMRGDAQDVQLNIGPNCKLR
 ITSQSFEKIHNTEGDFASRDMHIVGENAFLDFAPFLIPFENAHFKGNTTISLRSSQLLYSEIIVAGRVARNEL
 FKFNRHLTKISILQDEKPIYYDNTIILDPKTTDLNMMCMFDGYTHYLNVLVNCPIELSGVRECIESESEGVDAVSE
 TASSHL CVKALAGSGEPLHLREKIARLVQTQTTQKV

Seq ID 184

MKKISRKEYVSMYGPPTGDKVRLGDTDLIAEVEHDYTIYGEELKFGGGKTLREGMSQSNNPSKEELDIIITNALIV
 DYTGIYKADIGIKDGKLAGIGKGGNKMDQGVKNLSVGPATEALAGEGLIVTAGGIDTHIHFISSPQIPTAFASG
 VTTMIGGGTGPADGTNATITPGRNRLKWMRLAAEYSMNLGFLAKGNASNDASLADQIEAGAIGFKIHEDWGTTTP
 SAINHADVADKYDVQVAIHDTLNEAGCVEDTMAALAGRTMHTFHTEGAGGGHAPDIKIVAGEHNILPASTNPTI
 PFTVNTAEAHMDMLMVCHLDKSIKEDVQFADSRIRPQTIAAEDTLHDMGIFSITSSDSQAMGRVGEVITRTWQTA
 DKNKKEFGRLKEEGDNDNFRIKRYLSKYTINPAIAHGISEYVGSVEVGKVADLVWSPAFFGVKPNMIKGGFIA
 LSQMGDANASIPTPQPVYIREMFAHGHKAKYDANITFVSQAAYDKGIKEELGLERQVLVFNKCRNITTKDMQFNDT
 TAHIEVNPETYHVFDGKEVTSKPNKVSILAQLFSIF

Seq ID 185

MSMEFDAVIIGGGVSGCATFYTLSEYSSSLKRVAVEKCSKLAQISSAKANSQTIHDSIETNYTPEKAKKVRLSA
 YKTRQYALNKGQNEVIFETQKMAIGVGDEECFMMKKRYESFKEIFVGLLEEDKQKIKELEPNVILGANGIDRHN
 IIGHGYRKDWSTMNFAKLSNFVEEALKLPNNQVFLNFKVKKIEKRNDDTYAVIDEASEVYAKFVLVNGSYALP
 LAQSMGYGLDLGLGVAGSFYFVDPDLLRGKVYTVQNPKLFFAAVHGDDPAVIGKTRIGPTALTMPKLERNKCWLK
 GISLELLKMDLNDKDFKIAFDLMSDKIRNYVFKNMVFEPLIIGKRKFLKDAQKIIPSLSLLEDLEYAHGFGEVRPQ
 VLDRTRKRLLELGEKKICTHKGITFNMTPSPGATSCLOALVDSQEIAYLGESEFELERFYKDLSPPELEN

Seq ID 186

MRYFLVVFLLFLVFGCTKKDFTLKDLSLPQEASSYLASSQNGSNNNQSIDPQALRENLKESYLKAWYSPWLDKMKVKS
 NKKEVFWILKEMNKSTGYGEDLKPNAKAFNDALIKSMDIEHYPVSVKIRAVVARDSDVRAVPTNKPYYLSQKGYPPD
 RYQNSLIFQGTPLVLI THFNLDKTYAHIQSSFFVYGWIKVSDLVYMHDKDIELLTHLKDYVMPIDKIPLYTDYGDYF
 TNARVGELFALIPQSOKTPQKPKQKELKAYGFLRDAKGAAALQSVILEEKDFVFPKAFNSENMAFYIDTMLGQKY
 GWGGLGNRDCSAFTRDSFANFGILLPRNSYAQSRYANNYVDLSSMKAKEKEDYILKNATPFGTLIYLKGHIMLYL
 GAHNHQAIVAHSIWSVQTQKHFKTLSHKIGGVVITSLWLAEHNGAFSKKKLLIDRVLGMSDLKDFVNKTSSPLNA
 N

Seq ID 187

MKKKANEBKAQKRAKTEAKARATQENKTKENNAKESKIKESKIKEAKAKEPIPVKKLSFNEALEELFANSLSDCV
 SYESIIQISAKVPTLAQIKKIKELCQKYQKKLVSSSEYAKKLNADIKKITEEKQKVLDEELEDGYDFLKEKDFLE
 WSRSDSPVRMYLREMGDIKLLSKDEEIELSKQIRLGEDIILDAICSVPYLIDIFYAYKDALINRERRVKELFRSFD
 DDDENSVDSSKKDEEDNEEDEENEERKKVSEKDKRVEKVQESFKALDKAKKEWLKALEAPIDEREDLVRSITLA
 YKRQTLKDRLYDLEPTSKLINELVKTMETTLKSGDGFELKRLLEYKLPFNDFLIANHKILANITNMFKEDIIA
 QVPEATMVSVMYDLKLLFLTKEASEEGFDLAPNKLKEILEQIKRGKLISDRAKNMAKSNLRLVVSIAKRFTSRGL
 PFLDLIQEGNIGLMKAVDKFEHEKGFKFSTYATWWIKQAISSRAIADQARTIRIPIHMDITINRINKVMRKHIQENG
 KEPDLEVVAAEEVGLSLDKVKNVIKVTKEPISLETVPVGNDDGKFGDFVEDKNIVSSIDHIMREDLKAQIESVLDQL
 NEREKAVIRMRFGLLDDSDRTLEEIGKELNVTRERVRQIESSAIIKKLRSPQYGRILRNLYRI

Seq ID 188

MVQKIGILGAMRBEITPILELFGVDFEELPLGGNVFHKGVYHNKEIIVAYSKIGKVHSTLTSTTSMILAFGVQKVLV
 SGVAGSLVKDLKINDLLVAIQLVQHDVDSLAFDHPGFIPESAFIETSES LNALAKEVANEQHIVLKEGVIASGD
 QFVHSKERKEFLVSEFKASAVEMEGASVAFVQCQKFGVPCCVLRISDNADDEANMSFADFLEKSAQTSKFLKSMV
 DEL

Seq ID 189

MSFRINTNIAALTSHAVGVQNNRDLSSSLEKLSSGLRINKAADDSSGMAIADSLRSQSANLQGAIRNANDAIGMVQ
 TADKAMDEQIKILDITKAVQAAQDQGTLESRRALQSDIQRLLLEELDNIANNTTSFNGQOMLSGSFSNKEFQIGAY
 SNATVKASIGSTSSDKIGHVRMETSSFSGAGMLASAAQNLTEVGLNFKQVNGVNDYKIETVRISTSA GTGIGALS
 EIINRFSNTLGVASYNVMATGGTPVQSGTVRELTINGVEIGTVNDVHKNDADGRLTNAINSVKDRTGVEASLDIQ
 GRINLHSIDGRAISVHAASASGQVFGGNGFAGISGTQHAVIGRLTLTRTDARDIIVSGVNFVSHVGFHSAQGVAEYT
 VNLRAVRGIFDANVASAAGANANGAQAETNSQIGAGVTSLGKAMIVMDMADSARTQLDKIRSDMGSVQMELVTTI
 NNISVTVQNVKAESQIRDVDFAEESANFSKYNILAQSGSFAMAQANAVQONVLRLLQ

Seq ID 190

MKKNILNLALVGALSTSLMAKPAHNANNATHNTKKTDDSSAGVLATVDGRPITKSDFDMIKQRNPNFDFDKLKEK
 EKEALIDQAIRTALVENEAKTEKLDSTPEFKAMBAVKKQALVEFWAKKQAEVKKVQIPEKEMQDFYNANKDQLF
 VKQEAHARHILVKTEDEAKRIISEIDKQPKAKKEAKFIELANRDTIDPNSKNAQNGDGLGKFPQKNQMAPDFSAAAF
 ALTPGDTYTKTPVKTEFGYHIYILISKDSPVTTYTYEQAQPTIKGMLQEKLFQERMNQRIEELRKHAKIVINK

Seq ID 191

VRYIKFFKELNNKNVNLVGGKNASIGEMFQELVPIGKVPDGFATTSEAYWYLLEQGGAKQKIIELLENVDATFID
 VLKIRSKQIRELIFGTPFPSPDLRDEIFQAYEILSQYHMKADAVVRSSATAEDLPDASFAGQDQTYLNKGTTEL
 IYIKSCLASLFTDRAISYRASRGFDHLKVALSVGVQKMRADKGSAGVMFSIDTETGFKDAVFITSAGLGENVV
 GGTINPDEFYVFKPTLEQNKRPPIKQRLGNKTQKMVYAPRGSEHPTRNIKTTKKEWQSFSLSDEDVLILAKYAI EI
 EKHYSKAKQYRPMDEWAKDGESEGEIFIVQARPETVQSQSKEESQVFEKFKFKNPNEKKEIILQGRAIGSKIGS
 GKVRIINDLEHMNSFKEGEILVTDNTDPWEPCMKKASAVITNRGRTCHAAIVAREIGVPAIVGVSGATDSLYTG
 MEITVSCABGEEGYVYAGIYEHEIERVELSNMQETQTKIYINIGNPEKAFGFSQLPNHGVGLARMEMIILNQIKAH
 PLALVDLHHKKS VKERNEIENLMAGYANPKDFFVKKIAEGIGMISAIFYPKPVIVRTSDFKSNEYMRMLGGSSYEP
 NEENPMLGYRGASRYYESYNEAFSWECEALALVREEMGLTNMKVMI PFLRTIEEGKVLLEILRKNNLESCKNGLE
 IYIMCELPVNVILADDFLSLFDGFSIGSNDLTQLTLGVDRDSELVSHVFDERNEAMLKMFKAIEACKRHNKYCGI
 CGQAPSDYPEVTEFLVKEGITSISLNPDSVIP TFWNAVAKLEKELKEHGLTEH

Seq ID 192

MSAELIAYVKDEQIIDLES AKVLGLSDGIKALNGTEPIYFDDSPALAEVIRHSCAHLAQLKALYPDAKFFVGPV
 VEEGFYYDFKTSSKISEEDLPKIEAKMKEFAKLKLAITKETLTREQALERFKGDELKHAVMSKIGGDAFGVYQQGE
 FEDLCKGPHLPNTRFLNHFKLTKLAGAYLGGDENNELIRIYIGIAPATKEGLKDYLFQIEEAKKRDRHKLGVGL
 FSDDEIGAGLPLWLPKGARLRKRIEDLLSQALLRGYEPVKGPPEILKSDVWKISGHYDNYKENMYFTTIDEQYEG
 IKPMNCVGHIKVYQSALHSYRDLPLRFYEGVVRHEKSGVLHGLLRVREFTQDDAHIFCSFEQIQSEVSAILDFT
 HKIMQAFDFS YEMELSTRPAKSIGDDKVWEKATNALKEALKEHRIDYKIDEGGGAFFYGPRIKIDITDALKRKWCQ
 TIQVDMNLPERFKLAFTNEYNHAEQPVMIHRAILGSGFERFIALLSEHFGGNFPFFVAPTQIALIPINEEHVFAK
 LKEALKKRDI FVEVLDKNDSLKKVRLAEKQKIPMILVLGNEEVETEILSIRDREKQDQYKMPLEKFLNMVESKMQ
 EVSF

Seq ID 193

VKRILFFLVATTFLLLRAETDSATINTTVDPNVMFSESSTGNVKKDRKRVLKSVMNLEKERVKNFNRYSETKMSKGD
LSAFGAFFKGSLES CVDQKICYEHKDGKVSFVNDREKFYKHVLDLGTLSLPLFNWLYKGSDFGALHEQFGDM
YDGYIKYLISMVRISQKEKARKVDAIVLKKMEBQAEKOTKAAFQKRSSGELESHTDSPEFISSSKRTQNASNSDLN
SMTNANALKETASKEPEASSKKEKSKKKRRLSKKEKQQQALQOEFKQISDSSKSEK

Seq ID 194

MKEKNFWPLGIMSVLILGLGIVVFLVVFALKNSPKNDLVYFKGHNEVDLNFNAMLKTYENFKSNYRFLVGLKPLIK
SPKTPILPYFSKGTGDKKLQENLLNNALILEKSNLYAQLOPLKPALDSFNIQVYLAFYPSPSQPRWLGTLDCKN
ACEPLKFDLLES DKMGYKILFKFVFKNKEELILEQLAFFKQRI

Seq ID 195

MAYFLEQTDSEIFELIFEYKQNEHLEMIASENYTFASVMEAMGSVLTNKYAEGYPNKRYGGCEVVDKIESLAI
ERAKKLFNCQFANVQAHSGSQANNAVYHALLKPYDKILGMDLSCGGHLTHGAKVSLTGKHYSFSYGVNLDGYIDY
EEALKIAQSVKPEIIVCGFSAYPREIDFKKFREIADVEGALLLGDIAHVAGLVVTGEHAHPFPHCHVVSSTTHKTL
RGPRGGIILTNDDEEIAAKIDKAIFFPGTQGGPLMHVIAAKAVGFKENLKPEFKAYAQLVKSNMQVLAKALKEKNHKL
VSGGTSNHLMLMDFLDKFYSKGDADIALGNAGITVKNKTIPTGETRSPFVTSIGIRIGSAALSARGMGAKEFEIIGNK
ISDILNDINNVSILQHVKEELKAMVNQFPVYHQPIF

Seq ID 196

MKITYCDALIIGGGLAGLRASLACKQKGLNTIVLSLVFVRRSHSAAAQGGMQASLANAKKSEGDNEDLHFLDITVKG
SDWGCQQVARMFVTTAPKAIRELASWGVPTTRIKKGDRAVVNGEHVTITERDDRHGYILSRDFGGTKKWRTCT
ADATGHTMLYAVANEALHHKVDIQDRKDMLAFIHDNKCYGAVVRDLITGEISAYVSKGTLTATGGYGRVYKHTTN
AVICDGAGAASALETVGAKLGNMEAVQFHPTALVPSGILMTEGCRGDGGLRDKFGRRFMPAYEPEKKELASRDVV
SRRILEHIQKGYGAKSPYGDHVWLDIAILGRNHVEKNLRDVRDIAMTFAGIDPADSKEQTKDNMQGVANEPEYGO
AMAKQKGWIPKPMQHYSMGGVTRNPKGETHLKGLFCAGEAACWDLHGFNRLGGNSVSEAVVAGMIIGDYFASHCL
EAQIEINTQKVEAFIKESQDYMHLHNEGKEDVYEIRERMKEVMDEKVGVFREGKRLEALKEQLYARSKNIC
VKNKVLHNNPELEDAYRTKKMLKLALCITQGALLRTERGAHTRIDYPRDDEKWLNRTLASWPSAEQDMPTIEYE
ELDVMMKEISDPFRGYGKGNFIHPKKEERDABILKTIIELEKLGKDRIEVQHLMPPFELQEKYKARNMRLEDEE
VRARGEHLYSFNVHELLDQHNANLKGEHHE

Seq ID 197

MKDSFLFTSES VTEGHPDKMADQISDAVLDIYIERDQKAKVACETLVSNFGCMITGELKTSVYAPMQEIAREVVK
IGYTDALYGFDRSAAVLNGVGEQSPDINQGVDRDGEIGAGDQGLMFGYACKETETLMPLPIHLAQHQLTFALAQK
RKDNTLFLRPDGKSQVSVRYENNKPVSIDTIVISTQHSPEVSQKHLKEAVIEEIVYKVLKEYLHDNKKFFVNPT
GKFVIGGPQGDAGLTGRKIIIVDTYGGSCPHGGGAFSGKDPSKVDRSAAYAARYVAKNLVASGVCDKATVQLAYAIG
VIEPVSIYVNTHTNTSKYSSAELEKCVKSVFKLTPKGIIESLDLLRPIYSLTSAYGHFGRELEEFTEWKTNKAEI
AFFKR

Seq ID 198

MMKIVIDLMGADHGVLPVIEGVSRALENKSFSTVLVGDKDKATPFIISKELASKVEMIHTQDIYKMEEAATEAIKRK
ESSIYLGMDILKNGADALISAGHSGATMGLATLRLGRIGKVERPAICTLMPVSGKRPSVLLDAGANTCKPEYLID
FALMGYIYAKSVLHYDSPKVGLLSNGEEDIKGNMLVKETHKMLKAYDFFYGNVEGSDIFKGVVDVVCDGFMGNVV
LKTTEGVASAIGSIFKDEIKSSFKSKMGALMLKNAFDILKQKTDYAEYGGAPLLGVNKSVTIISHGKSNARAIECAI
YQAISAVESQVCLRITQAFESLKPSVSQSDQDA

Seq ID 199

MEFYASLKSIAMHVPSEKNAEFQQFLDTSDEWIEKRTGIKERRFANDEEKSSDLGVIAAKQAIERAHLTPKDID
LVVVATLSPDFLAMPSTACVLSAKLGIENKPAFDISAACFGFIYLLSVAKAYVESGMYENVLIVGAERTSSVLD
DRGTCILFGDGAGACVIGRTKRLKESILDVQISANGNFSNYLYTPRTLKPTPFNAKEEASEPFLCMKGNVFKLAV
KTLKLDVEMILEKNALKPEDVRLFIHQANFRIIQAVREHLDFKDEQVVLTVHKYGNNTSAASIPMAMGEAYEEGRL
KKGDLMLLDAGGGGLTWGSALVYFGGS

Seq ID 200

MSNQYETFQTEINQLLDLMIHSLYSNKEIFLRELVSNASDALDKLNYLMLTDEKLKGLNTTPSIHLSFDSQKKTLT
IKDNGIGMDKNDLIEHLGTIAKSGTKNFLSALSAGDKKKDSALIGQFGVGFYSAFMVASKIVVQTKKVNSDQAYAWV
SDGKGKFEISECVKDEQGTETITFLKDEDSHFASRWEIDS VVKYSEHIPFPIFLTYTDTKHEGEGDNQKEIKEEK
CEQINQASALWKMKNKSELKDKDYKEFYQSFAHDNSEPLSYIHNKVEGSLEYTTLFYIPSTAPFDMFRVDYKSGVKL
YVVRVFTITDDDKELPSYLRVFKGVDSIDLPLNVSREILQONKILANIRSASVKILSEIERLSKDEKNYHKFYE
PFGKVLKEGLYGFENKEKLELLRFYSKOKEKLIISLKEYKENLKENQKSIYYLLGENLDLLKASPLLEKYAQKGY
DVLILLSDEIDAFVMPGVNEYDKTPFKDASHSESLKELGLETHDEVKDQFKDLMKAFFENLKDEIKGVELSSHLTS
AVALIGDEQNAMMANWMRQMGQSVPEKKTLELNPNHAILQKLLKCEDKEQLSAFIWLLYDGALEKLGALDKAKS
FNERLNSVLLKAL

Seq ID 201

MLGNVKKTLFGVLCGLTCLRGLMAEPDAKELVNLGIESAKKQDFAQAKTHFEKACELKNGFGCVFLGAFYEEGKG
VGKDLKKAIFQYTKGCELDNDGYGCNLLGNLYYNGQGVSKDAKASQYYSKACDLNHAEGCMVLGSLHHYGVGTPKD
LRKALDLYEKACDLKDSGPCINAGYIYSVTKNFKEAIVRYSKACELKDGRCYNLGMQYNAQGTAKDEKQAVENF
KKGCKSSVKEACDALKELKIEL

Seq ID 202

MRKKGMFEKIQKEWLSNIQKDLLSGFVVGLSVIPETAGFAIMVGLDVGVAFYTTTFYMAFVLSLFGARKAMISAAAG
SVALILVGVVKNYGLYAGVATLMAGVLQILLGYLKIGNLLRFIPQSVMYGFFVNALGILLMEQFKFLQNLQNLGVF
VLLAIGILIIYLFPLITTKIPSNLIIILIVSALALIFDMHAPNLGSIHQGVSGFHFIIIPKNLDFKIMIELLPYAL
SLALVGTIESLLTAKTLDVILKDGVS DNKETKAQGLGNIISGLLGGMTGCALVGQSIINAKSGAKTRLSTFFAGF
SLMVLILVFNEYVVKIPIVAVVAVMVMISFTTFNFQSIINIKKIKLYDTLNMILLVAVVLYTHNLAIGVVVGVLVN
ALWIKSKGIA

Seq ID 203

MKKTILLSLMVSSLLAENDGVFMSVGYQIGEAQQVQKNTGGEIQKVSNAZENLNNLLTRYNELKQTASNTNSSTAQA
IDNLKESASRLKTTTPNSANQAVSSALSSAVAMQVIVSNLANNSLPTSEYNKINAISSQLQNTLENKNNDLKIEND
YDHLTQASTIINTLQSQCPGIDGGNGKFWGINASGNACNIFGNTFNAITSMIDSAKKAADARRTAPESPNQPSA
FNNADFNKNLNQVSSVINDTISYLGKDNLATIYNTLQKTPDSKGFQSLVSRSSYSYSLNETQYSEFQTTTKEFGHN
PFRSVGLINSQSNNGAMNGVGVQLGYKQFFGKNKFFGIRYYAFFDYNHAYIKSNFFNSASNVFTYAGSDLLNFI
NGGSDKNRKVSFGIFGGIALAGTTWLSNQFMNLKTTNSAYSAKINNTNFQFLFNTGLRLQGIIHHGVELGVKIPTIN
TNYYSFMGAKLAYRRLYSVYFNYVLAY

Seq ID 204

MGVKFLKILVCGLFFWLSNAHLWGKQDNSFLGVAEKAYKSGNYSKATSYFKKACNDGVSEGCTQLGIIYENGQGTR
IDYKKALEYKTAQADDREGCFGLGGLYDEGLTTONYQEAIDAYAKACVLKHPESCYNLGIYDRKIKGNADQA
VTYYQKSCNFDMAKGCYVLGVAYEKGFLEVKQSNHKAIVYYLKACRLDDGQACRALGSLFENGDAGLDEDFEVAFD
YLQKACGLNNSGGCASLGSMYMLGRYVKKDPQKAFNFFKQACDMGSAVSCSRMGFMYSQGDVAVPKDLRKALDNYER
GCDMGDEVGCFALAGMYNMKDKENAIMIYDKGCKLGMKQACENLTCLRGY

Seq ID 205

MELETHLSKYFTLAFTHKSMSLEMRKLAINSNATLKEFLQTIKNHCPNIKECMVLSTCNRFEIYASLKHGANTNE
QKNALLKILAQNKKMSVSDLEKCVLMNTDES AVHHVFSVCSSLDLVVGETQITGQMKNAYKFAFEKFC SKDLTR
LLHFAFKCAAKVRNLTGISKQGVSISSVAVKEALNIFEKERIKDKKALVIGLGEMAQLVIKHLNKKQFEALILGRN
AAKFEDFIKELEEPKKVSFQNIENLNAYINEYELLFCATSSPHFIVQNRMLKETIFRFRWFDLAVPRNIEKPVLDN
IFLYSVDLEPMVRENVENRQESRMRAYEIVGLATMEFYQWIOSLEVEPVIKDLRELARISAQKELQKALKKRYVP
KEYENNIKILHNAFNTFLHNPTIALKKNQKEESDVLVGAIKNLFNLDKSNANHAQNLNLYKCEYYEE

Seq ID 206

MFIVAVLMLAFLIFVHELGHFTIARICGVKVEVFSIGFGKLCFFKLFGTQFALSILPLGGYVKLGMDKEENG MN
ETTDSDSYAQKSPFQKLWILFGGAFFNFLFAILVYFFLALGGEKVLLEPVIGDLDKNALEAGLLKGDKILSINHKKIA
SFREIRSVVARARGELVLEIERNHQVLEKRLTPKIVAVISDSNDPNEMIRYKAIGIKPDMQKMGVVSYSLFQAF EK
ALSRFKBGVVLIVDSLRLIMGSSSVKELSGVVGIVGALSHANSLSMILLFGAFLSINLGIILNLLPIPALDGAQML
GVVFNIFHITLPTPIQNALWLAGVGFVLFIMFLGLFNDLTRLL

Seq ID 207

MLLKNASFYDDEVLRADIRLKDSLITEIKENLSPINNEEVIECRDLFVLPSFIDLSVTGLEGYENLKQKAFKGGV
GLLNVFNCQQSGIKNIMATKNNQLADIATLKNKGGEILIIAPSDAFLELISHYAKSYNLPLLSLENSFEALNSGEL
AYELGQNFVENAFENTRLVRFMESRALQIPVLLDKVNSITTLKLIKAFNDLGAKLQAQTPLSHLVLDESVEYEDYE
PRFKIAPPLRDKESQNALKEALKNNELIAMLTSLSHASKNSNAQLFEESAFGCESIEDAFSVAYTFLVQKKVISFQQL
IKVMAINQAKFLKLNAGEVKENQLANLMIVDLNAQTRVSNQNSPFYGLLEYGEVQRMILKGQTTFIKENACKKS

Seq ID 208

LKIAIVRLSALGDIIVSAVFLAVIKECLPNAQIEWFVDERFSAILEHSPYIDKLHPIALKSALKTLNPLKIFKLFK
SLRAYEYDIIIDMQGLVKSALITQMLKAPKKVGFYASAREGLSMFFYSQKVSIAYPEVLKRNFTLLSHALNLPQ
KEISKEISESLSSRAKAFSYQPSPKIDALNLNKNPKILFILETSKINKTYPIERFKELALILENFQICLLWHADE
YKATTLYHALKHQRDVLPLKLTNEVKALLFKMDLIIGDGTGITHLAWALQKPSITLYGNTPMERFKLESPI NVS
LTGNSNANYHKKDFSIOINIEPKKIKECVLNILKEKE

Seq ID 209

MKKFKKKPKSIKRSHQNKTIILKRPLWLMPLLSIGFASGVYANNLWDLNPNKVGGEYVHWKGSQYCAWWEFAGCL
KNVWGANHKG YDAGNAANYLSSQNYQAISVSGSNETGTYSLSGFTNYVGGNLTINLGNSVVLDSLGSNSFTSYQGY
NQGKDDVTFTVGAINLNGTLEVGNRVGSGAGTHTGTATLNLNANKVNINSNINAYKTSQVNIGNANSVITIGSVSL
SGDVCSSLASVIGIGANCSTSGPSYSFKGTTNATNTAFSNASGSFTFEENATFSGAKWNGGTYTFNKEFSATNNTAF
SSGSFNFKGVSFFNGTSFSNASYTFDNQATFQNSSENGGFTTFNNQTNPTNNAQHPQIQNSSFSGNATTLKG FVNF
QOAFNNSNHQLTIQNASFNATFNNTGKITIEKDA SFNNTTFNTSVDTNNMSVTGGVTLSGKNDLKNGSTLDFGSS
KITLAQGTTFNLTSLGSEKSVTILNSSGGITYSNLLNHAINGLTSALKTNESLSNPQSAQGLWDIITYNGVTGQL
LNENAATSKPTDSSPSKSTNSTQVYQVGYKIGDTIYKLQETFSHNSIIIQALES GTYTPFPVINGSKFDLSASNY
INADMPWYDHKYYIPKSONFTESGTYLPSVQIWGSYTN SFKQTF SANGSNLVIGYNSTWTDHNVSSSGTVSFGDT
SGSALNGHCGPWPYYQCTGTNGTYSAYHYITANLRSNGNRI GTGGAANLIFNGVDSINIANATITQHNAGIYSSS
MTFSTQSMDNSQNLNGLNSNGKLSVYGTTFTNEAKDGKFI FNAGQAVFENTNFNGGSYQPSGDSLNFSSNNQFNSG
SFEISAKNASFNANFNNSASFNFNNSNATTSFVGDTFNANSNLQIAGNAVFGNSTNGSQNTANFNNTGSVNI SGN
ATFDNVVFNPGTNTSVKGQVTLNNTITLKNLNAPLSFGDGTITFNAHSVINIAESITNGNPITLVSSSKEIEYNNAF

SKNLWQLINYQHGASSEKLVSSAGNVYDVVYSFNNQTYNFQEVFSQNSISIRRLGVNMVFDYVDMKSDHLYYO
 NALGFMTYMPNSYNNNLGNANNTIYYDYKSIDFYASGKTLFTKAEFSQFTFGQNSAIVFGAKSIWTSLSDAPOSNT
 IIRFGDNKGAGSNDASGHWCWNLQCIGFITGHYBAQKIYITGSIHSGNRISSGGGASLNFNGLQGILLTNATLYNRA
 AGTQSSSMNFISNSANIQAQNSYFIDDTAQNGGNPNFNSFNALNLDNFSNSSFRGYVGKTSQSVFKFNAKNAISFTNST
 NLSSGLYQMQAKSVLFDNSNLSVSVGTSSIKANAINLSONASINASHSTLELQGDNLVNDTSSLNLNQSTINVS
 NATINDYASLIASNGSHLNFNGAVNFNSANITTSLNNSIVFKGAVSLGGQFNLSNNSSLDQGSSEITNTAFNF
 YDNAFSQSPITTFHQALDIKAPLSLGGNLLNPNSSVLDLKNSQLVFGDQGSNLNANIDLLSDLDNDKNRVYNIQA
 DMNSNWWYERISFFGMHINDGIYDAKNQYTSFTNPLNNAKLTESFKDNQLSVTLSPQIKNTLYNIGSEIFNYQK
 VYNNANGVYSYSDDAQGVFYLTSTNVKGYYNPNQSYQASGSNNITKNNNLTSESSIISQTYNAQGNPISALHIYNGK
 YNFMNIKALGQMAKLYPEIKKVLGNDFSPSSLNALNSNALNQLTKLITPNDWKNINELIDNANNSVQNFNNGTL
 IVGATQIGQTDNLSAVVFGGLGYQTPCDYTDIVCQKFRGTYLQQLLESSADLGYIDTTFNAKEIYLTGTLGSGNA
 WGTGGSASVTFFNSQTSLLINQANTIVSSQTDGIFSMLGQEGINKVFNQAGLANILGEVAVQSINKAGGLGNLIVNTL
 GSNSVIGGYLTPEQKNQTLSQLGQNNFNDNLNDSGLNTAIKDLIRQKLGFWTGLVGGLAGLGGIDLQNPKEKLIGS
 MSINDLLSKKGLFNQITGFISANDIGQVISMVLQDIVKPSNALKNDVAALGKQMGIEFLGQDITLNSLESLLQNOQI
 KSVLDKVLAAKGLPIYEQGLGDLIPNLGKKGFLFAPYGLSQVWQKGDFFSNAQGNVVFQNSTFSNANGGTLFSNAG
 NSLIIFAGNNHIAFTNHAGTLQLLSDQVSNINITLNASNGLKINAANNVSVSQGNLFVVSACAQSDPTTANIAN
 PCALSAQSTNGASSNNASNNAPIALSNNDSESLMVAANDFNFSGNIYANGVVDFSKIKGSANIKNLYLYNNAQFQAN
 NLTISNQAVLEKNASFTVNNLNIQGAFFNNATQKIEVLQNLVIASNASLSTGIYGLEVGALNNSGAIHFNLENTQ
 TPTPLIQAEGIINLNTTQTPFMNVNNSMANNTTYTLLKSSRYIDYNINPNLSQSYLNLYTLININGNHIEEKNGAL
 TYLGQRVLLQDKGLLSVALPNSNNASQNNILSLSVLYNQVKMSCGDKAMDFTPTTLQDYIVIGIQGQSALNQIEAV
 GGNAIKWLSTLMMETKENPFFAPIYLNKHSLENLGVTCKDLQNTASLISNPNFRDNATNLLELASYTQOTSRLTKL
 SDFRSREGESDLSLELKNKRFSDPNPEVFKYSQLSKHPNLLWQGVGGASFISGNGTLYGLNAGYDRLVKNV
 LGGYVAYGYSDFNNGNIMHSLGNNVDVGMYARAFKRNFTLSANETYGGNATSINSSNLSLVNQRVYNTWTTS
 VNGNYGYDFMFKQKSVVLKPVGLSYHFIGLSGMKGNDAAKQFLMHSNPSNESVLTILNMGLESRYFKGNSYFV
 TARLGRDLLIKSGKSNTRVRFVAGENTLLYRKGEVFNTFASVITGGEMHLWRLVYNAGVGLKMGLOQDINTGNVG
 MRVAF

Seq ID 210

MFEKITLAHKDLFSRFLSAQKIVLSDVSFTNCFWQHARLIQVAVIRDCLVIQTTYENQKPFYFYPYIGKNAFECVK
 ELLKLEKNLRFHSLTLEQKDDLKDNFVGVDFTYNRDRSDYVYSIELIALKGKKYHKKKNHLNQLFTNHFVYE
 KISPQNKKEVLEASQWFLBSQTDIDIGLINENKGIQSVLENYESLDVKGGILRVNGELIASFSFGEVLNEESALIH
 EKARTDIAGAYQIINQQLLLNEFSLTYANREEDLGLEGLRRSKMSYNPVFLIDKYEAVAKN

Seq ID 211

MRVTFGSKYNQNMNYYQNALQNKINDANTQIASGLKIRYGYQNSDINNQNLFQYEENTLDQGDIDVAQNAYTSTLNT
 DKALQEFSKTMEAFKTKLIQSANDVHSETSRAAIANDLERLKEHMINVANTSIGGEFLFGGSKVDRPPIDSNGKYH
 GNGEDLNVLISSDNLVPYINISGQDLFLGTDKDKHKLITTNIKLFNQNLHPDVMDALEHSSLPPEEVFIKPSDTLRE
 LIGDNDKDPNDPKEFFYLQGVPRDGSSFKERFALDKAYQNGESASKVSDDLKIAHAYGNTSQNKVVDVSLNNWG
 QIEIKNLTPGSENLDLFLISSDGDFFDDLALRSSGKRVTEYIKSAFVTDRLSLSQVKAVERNMYNPKVLEVPVSVFTK
 DNVLANKNLTKLSEIFGDSVETLKINASRLDETSKIPNLPVYLDIPILLDVKNSTIKDLKDAIKKRFNNEVDVEI
 ETNGRLRIIDNSSKESPIALSALDAKGLEVAGIPTNNASEYQKTYFNKEGAKLESNVAQNAANGSTKLSE
 AAKGSLSENSVFNMKLNDVNGLFLEAQMNLDNNGAFLSLPNGIKIPLYDPTSADIQASKPNEVTYRQLMDAMSIALN
 YSNTDPAIYQQISDNPTSKESEKRFIGLLKQAKDNLVNLNEEGKVI IQDNMHSNTKMQFMLFDKDANDFSQNALH
 SDKPSLKLNANNALIIDKPSVNFDDQLENTITSVRKGIYRPDALGDTYSSDMRNLGIQNGITLIDHLSDHIEKMIA
 KNGAHGKAFENIIRNEVLKTQVQSIRGETTGTDMAETYNKFSNLTNYNNAVLAATNKINNLSTKYL

Seq ID 212

MDRAKFIFVTGGVLSLKGKISSSSSIATLLQHCHNYQVSILKIDPYINIDPGTMSPLEHGEVFTSDGAETDLDIGH
 YERFLNRNLTRLNNTTGTQIFSSVIENERKGEYLKGTIQIVPHVTDEIKRRIKSAAGLDFLIVEVGGTVGDMEGM
 FYLEAIRQLKLELGNEKVINHVTLIPYIQTTELKTKPTQHSVQELRRLGVTPQIILARSFKPLDKELKNKIALS
 CDVEQDSVIVATDTKSIYACPIFLQEGILTPARFFNLNKLHPKMAAWNLTVEKIIAPKHVKVIGFVGKYLKLE
 SYKSLIEALIHAGALDQVNIWLDSENFNEKTDLGVDAILVPGGFGERGIEGKICAIQARLEKLPFLGICLG
 MQLAIVEFCRNVGLGKGANSTEFNQRCPEYVYVYLGDFMDQNHQKQVRYTNSPLGGTMRLEGEYCEIMPNSLLEKA
 YKKPSIKERHRRHYEINPKYRQEWENKGLKVVGFGSNHLEAIELEDHPPFVGQVQHFPEFTSRLQSPNPILDFIK
 SALSXS

Seq ID 213

LDLKVLLQRIVDFFIKLKKQKIALIAAGVLITALLVFLLLYPFKEKDYTQGGYGVLFEGLDSSDNALILQHLQON
 QIPYKVSQDPTILIPKDKVYEERTLASQGIPKTSKVGFETDQDKFGATDFDQNIKLIRAEGLSRTIESLNPI
 LKANVHIAIPKDSVFVAKEVPPSASVMLKLKPKDMKLSPTQILGIKNLIAAAVPKLTIENTVKNENGESIGEGLD
 ENSKALEQQLHYKQNFENILENKIVNIIAPIVGGKNKVVARNAEFDQSQKSTKETFDPNNVVRSEQNLEEKKE
 GASKKQVGGVPGVVSNIQVQGLKDNKEPEKYEKSONTNYEVGKTISEIKGEFGTLVRLNAAVVVDGKYKIALKD
 GVNTLEYEPLSDESLOKINALVKQAIGYNQNRGDDVAVSNFEFNPMAVIDNATLSEKIMHKTQKILGSFTPLIKY
 ILVFIVLFIYKVKVIVPFSERMLEVVPDEDKEVKSMEFEMDEEDELNKLGLDRKKVEDQLGLNASFSEEEVRYEI
 ILEKIRGTLLKERPDEIAMLFKLLIKDEISSDGAKG

Seq ID 214

MYVEKILQSLQKKYPYQKEFHQAVYEAITS LKPLLDSDKSYEKHAILERLIEPEREIFFRVCWLDNNOIQVNRGC
RVEFNSAIGPYKGLRFHPSVNESVIKFLGFEQVLKNSLTTLAMGGAKGSDFDPKGKSEHEIMRFQCAFNMELYR
HIGATTDPAGDIGVGEREIGYLFQGYKLVNRFEGVLTGKGLTYGGS LCRKEATGYGCVYFAEMLQERNSSLEG
KVCSVSGSGNVAIYTIKLLQIGAKPVTASDSNGMIYDKDGIDLELLKEIKEVRRGRIKEYALEKKSABEYTPTENY
PKGGNAVWHVPCFAAFPSATENELSVLDAKTLLSNGCKCVAEGANMPSSNEAIGLFLOAKISYIGIGKAANAGGVSV
SGLEMAQNASHMPWSFEVVDAKLHHIMKEIYKNVSQTAKEFKDPTNFVLGANIAGFRKVASAMIAQGV

Seq ID 215

MDDLQEIEMDFLIEAFEMNEQLDQDLVELEHNPELDLLNRIFRVAHTIKGSSSFNLNLTHLTHNMEDVLNRR
KGEIKITPDIMDVVLRSIDLMKTLVTIRDTGSDTNNGKENIEEAVKQLQAITSONLES AKERTTEAPQKENKEE
TKEEAKBENKENKAKAPTAENTSSDNPLADEPDL DYANMSAEFEABIERLLNKRQEADKERRAQKKQEAQKQEV
TPTKETPKAPKTETKAKAKADTBENKAPSIGVEQTVRVDVRRDLHMLNIGELVLGNRLIRIYSDVBERRYDGEKF
LEELNQVSSISAVTTDLQLAVMKTRMQPVGKVFNFPRMVRDLSRELKGSIELIEGEETELDKSIVEEIGDPLI
HIIRNSCDHGIEPLEERRKLNKPETGKVQLSAYNEGNHIVIKISDDGKGLDPVMLKEKAIKGVISERDAEGMSDR
EAFNLIFKPGFSTAKVSVNVSGRGVGMDVVKTNIEKLNIGIEIDSEVGVGTTQKLKIPLT LAIIQALLVGVOEYF
AIPLSSVLETVRISQDEIYTVDGKSVLRRLRDEVLSLVRLSDIFKVDAILNESNDVYVVIIGLADQKIGVIVDYLG
QEEVVIKSLGYLLKNTRGIAGATVRGDGKITLIVDVGAMMDMAKS IKVNITTLMNESENTKSKNSPSDYIVLAIDD
SSTDRAIIRKCLKPLGITLLEATNGLEGLEMLKNGDKIPDAILVDIEMPKMDGYTFASEVRKYNFKNLPLIAVTS
RVTKTDRMRGVESGMTYITKPYSGEYLTTVVKRSIKLEGDQS

Seq ID 216

VIELDINASDKSLSHRAVIFSLLAQKPCFVRNFMGEDCLSSLEIAQNLGAKVENTAKNSFKITPPTTIKEPNKIL
NCNNSGTTMRLYSGLLSAQKGLFVLSGDNSLNARPMKRIIEPLKAFGAKILGREDNHFAPLVILGSPKACHYESP
IASAQVKSASFILSALQAQASTYKESELSRNHTEIMLKS LGADIHNDGV LKISPLEKPLEAFDFTIANDPSSAFF
PALACAITPKSRLLLNVLNFPTRIEAFV LKMGASIEYAIQSKOLEMIGDIYVEHAPLKAINIDQNLASLIDEI
PALSIAMLFAGKSMVKNKADLRAKESDRIKAVVSNFKALGIECEEFEDEGDFYVEGLEDISPLKQRF SRIKPLIKS
FNDHRIAMSAFVLTALPLEIDNLECANISFPQFKHLLNQFKKGS LNGN

Seq ID 217

LDILDLNKAQAVQONEQFVEDKERESKEFPVLEDSLALAWLEEEFSRLSGLPKERILELVNLGKIKSKISSNKL
IDASSGTNALIKKVENSLISM DNGRSLPEVFEKTINTILNLHDKVIGAKDETISAFKNENMFLKDALISMQEVY
EEDKKTIDLLRDELNQAREEIEFMKRKYRLMWGKVADMSV NKK

Seq ID 218

MILVLDGFSQYQTQLIARRLRERGIYTEIVPFFESIE NIQKKAPKGLILSGGPASVYAKDAYKPSGKIFDLNVPI LG
ICYGMQYLVDFFGGVVVGANEQEFKAVLEITQNSVIFEGVKIKSLVWMSHMDKVIELPKGFTTLAKSPNSPHCAI
ENGKIFGLQFHPEVVQSEEGGKILENFALLVCGCEKTWGMQHFQAQREIARLKEKIANAKVLCAVSGGV DSTVAVTL
LHRAIKDNLI AVFVDHGLLRKNEKERVQAMFKDLKIP LNTIDAKEVFLSKLGKGVSEPELKRKIIGETFIEVFEKEA
KKHHLKGKIEFLAQGTLYPDVIESVSVKGPSKVIKTHNVGGLPEWMDFKLIEPLRELFKDEVRLLGKELGVSQDF
LMRHFPFGPLAVRLGEISESKIKRLQEA DFIIEELKKANLYDKVWQAFCVLLNVNSVGVMGDNRTYENAI CLR
AVNASDGMTASFSFLEHSFLEKVSNRITNEVSGINRVVYDITSKPPGTIEWE

Seq ID 219

MKVNGKFKFRLYPTKEQQDKLQHCFFVYNQAYNIGLNELOEQYETNKDSPPKERKYKKSSELDNAIKQCLRARDLP
FSAVIAQQARMNVERALKDAFKVKNRGFPKFKNSAKQSFSWNNQGSIKESDDECFTFTLMKMPLLMRMHRRL
PPNFVKQISISCSHRKYFVSFSVEYEQDITPIKNTKNGVGLDLNILD TACSCEINNHDKLTDFKQYQTD MKELLG
IEIDEELDTKRLIPTYSKLYSLKKYSKKFKRLQRKQSRRC

Seq ID 220

MLESALKYCKEKAIDLLVGFPKTY SMAQECNIGLYDDAFIITKQENLVGIIISLQGLSYSNLMQKDLEGYFDARQ
NVLNTISKDIQLRIVAKRRKEFINQSPNIDNIYAKAIITQFESKGIYKTEYFLVFETITSNVKSFFEKKKLEMTTS
INEELEESSKEDKQENENSSNETHSNTSSKKDKKNKFKKITFSTKSKRALLIQTIERVKNALKEFKPTLLNSKEV
LNFYAEYINGKYIAFNPKLRKLSDSYIASNVHFKDYFVIEFQNTFCACVGIKAYESEESSLP ISTLLHTQIE
LDLIFHRSIGQFESLNF LKTKKLTLSKIVKADIDNYIELVQANRLSMQECALNLVIRAKSKAKLDKSLKEILSL
LNNAGLGSVTETIGLKPSYFSFFPNNANINPRMRHQT SQVIASLILFEKNNTGFRANSWGDMP LSVFKNLDHSPYL
FNFHNQEVKHKGVLAHNVARVVGHTMIIGATGAGKTTLSYLMMSALKYSNIDILALDRNLGLYSFTKYFDGIYNQ
GENFHINPFSLEDSATNRAFLH FYAQMAKVDSYDDHKDKVEDRTALLNAIDTMYRNYNDEVKQAKFSNQELPLPF
DLKEFVNIAKTNTDILDSSFEDYKSSLFSSRMSLD FKTRISTINTDSILHNDDAGLLAYVVFHKMIDRALKI
NRGFLCFIDEFKSYAQNEMMNKINEIITQARKANGVIVLALQDINQLSEVRNAQSFIKNGMGLILYPQRNIDTKD
LNDKFGIRLSDTEKHFLONTAVNEYKVLLKNMNDGSSNIIDVSLSSLGNLYLQIFSSNSSMVEHIDNLIKHYPKTWR
EVFVSNKHENFDDKKHLEKVLK

Seq ID 221

MKNIRNIAVIAHVDHGKTTLV DGLLSQSGTF SEREKVDERVMSNDLERERGITILSKNTAIYKDTKINIIDTPG
HADFGGEVERVLKMDGVLLLVDAQEGVMPQTKFVVKALSFGICPIVVVNKIDKPAAEPDRVDEVFDLFVAMGA
SDKQLDFPVVYAAARDGYAMKSLDDEKKNLEPLFETILEHVPSPSGSVDEPLQMQIFTLDYDNYVGKIGIARVNG
SVKKNESVLLMKSDGSKENGRIITKLIGFLGLARTEIENAYAGDIVAIGFNAMDVGDSVVD PANPMLDPMHLEP
TMSVYFAVNDSPLAGLEGKHTANKL KORLLKEMQNTIAMKCEEMGEGKFKVSGRGELQITTLAENLRREGFEFSI

SRPEVIKEENGVKCEPFHELVIDTFQDFSGAIIERLGKRAEMKAMNPMSDGYTRLEFEIPARGLIGYRSEFLTD
TKGEGVMNHSFLEFRPFGSGVESRKNALISMENGEATAFSLFNIQERGTLEINPQTKVYVGMVIGESHRDNDLDV
NPIKSKHLTNMRASGSDDAIKLTPRMTVLERALEWIEDEILEVTPLNLRIRKKILDPNMRKRAK

Seq ID 222

MKKIGLSLCLVLSLGLKAHEVSAEELADIFYKLNAKSEPKMKINHTKGFCAKGVFLPNAQAKKDLDVPLINEKEIP
ASVRYSLGGVAMDDKSKVRGMALKLENQNASWTMVMLNTEINFAPKNPNEFAQFFEMRI PKNGKVD EARIKKLYEEV
PSYRNFAAYTKTIGISSSVANTPYYSVHAFRFKDKGKLLPARWKFPKKEGIKYNLPQELKQKDSNYLLSAFQOHL
KTKPIEYQMYLVFANKNDATNDTTALWKGKHKELLVGTLKVEKYEKGMCNKDVYFPADLPKGVEAPTDPLFQIRNE
VYGITFSRRQ

Seq ID 223

MLRLLIGLLMSFISLQASASWQEPLRVSI EFVDLPKKIIRFPAHDLQVGEFGFVVTKLSDYEIVNSEVVI IAVENG
VATAKFRAFESMKQRHLPTPRMVARKGDLVYFRQFNNAFLIAPNDELYEQIRATNTDINFISSDLLVTFLNGFDP
KIANLRKACNVYSVGVYIYVTTNTNLILSCESFEILEKRELDTSVTKTSTPFFSRVEGIDAGTLGKLFSGSQSKN
YFAYYDALVKKEKRREKVRIRKREKIDSRBIRKREIKQEAIKEPKKANQGTQONAPTLSEKNYQKAERKLDAKBERRY
LRDERKKAKATKKAMEFEEREKEHDERDEQETEGRRKALEMDKGDKEERVKPKENEREIKQEAIKEPSDGNNAQ
QGEKQONAPKENNAQKEENKPNSEKERRLKEEKKKAKABQARAREFEQRAREHQRERDEKELEERRKALEAGKK

Seq ID 224

MFKDFYRTTSLFLKPLLLLLLVLLL PFSLCIADEYISISDDWDEIVRNHKTYYFENGLDHFNQGGYQQAQKDFRLAQ
EYSIGLGSVYLAKMYLEGKGVVDYKKAQFYAENAIKGYGSGLLGALILGRMQAEGLGMMKDLKQALKTYRHVVR
MFSNKSTNFANNFRLPNLAFTSMLIGSRFIDLSGLSANPIKFGKKFGILVKKSTQIKDKTLLWEDIAEISSNITL
LKQQMGELIYRIGIAYKEGLGTRKKDRAKKFLQKSAEFGYKAMEAL

Seq ID 225

MTEDRLSAEDKKFLEVERALKEAALNPLRHATEELFGDFLKMENTEICYNGNKVWVLKNNGEWQPFVDVRDKAF
SLSRLMHFARCCASFKKKTIDNYENPILSSNLANGERVQIVLSPVTVNDETISISIRIPSKTTYPHSFEEQGFYN
LLDNKEQAI SAIKDGIAGKNVIVCGGTSGGKTTYIKSIMEFIPKEERIISI EDETEIVFKHHKNYTQLFFGGNIT
SADCLKSCLMRPDRILGELRSSEAYDFYNVLCSGHKGTLTTLHAGSSEAFIRLANMSSSNSAARNIKFESLIE
GFKDLIDMIVHINHKKQCEFYIKHR

Seq ID 226

MNEENDKLETSKKAQQDSPODLSNEEATEANHFENLLKESKESSDHHLNPTTETQTHFDGDKSEETQTQMDSEGNE
TSSENGSLADKLFKKARKLVNDKKPFTQQKNLDEETQELNEEDDQENNEYQEETQTDLIDDETSKKTQQHSPODL
SNEEATEANHFENLLKESKESSDHHLNPTTETQTNFDGDKSEETQTQMDSEGNETSESSNGSLADKLFKKARKLV
NKKPFTQKNLDEETQELNEEDDQENNEYQEETQTDLIDDETSKKTQQHSPODLSNEEATEANHFENLLKESKES
DHHLNPTTETQTNFDGDKSEETDSDNDQEI IKGSKKKYIIGGIVAVLIVILFSRSI FHYFMPLEDKSSRFSKO
RNLYVNDIEIQIRQEYNRLKERNEKGNMIDKNLFFNDPNRTLYNLINAEIEDKNPLRAFYEICISNGGNYEELCK
LIKDKKLQDQMKKTLEAYNDCKNAKTEERIKCLDLIKDENLKSLLNQKVQVALDCLKNAKTDEERNECLKLI
NDPEIREKFRKELELQKELQYKDCIKNAKTEAKNCKLGLSKEAIERLKQQALDCLKNAKTDEERNECLKNIPO
DLQKELLADMSVKAYKDCVSKARNEKEKQCEKLLTPEARKKLEQQVLDCLKNAKTDEERKCKLDLPKDLQSDIL
AKESLKAYKDCVSOAKTEAEKKECEKLLTPEAKKLEEEAKESVKAYLDCVSOAKTEAEKKECEKLLTPEAKKLE
EAKSVKAYLDCVSRARNEKEKKECEKLLTPEAKKLEEQQALDCLKNAKTDEERKCKLDLPKDLQKKVLAKESV
AYLDCVSOAKTEAEKKECEKLLTPEARKKLEEEAKSVKAYLDCVSOAKTEAEKKECEKLLTPEARKKLEEEAKESV
KAYLDCVSOAKNEAKKECEKLLTLESKKLEAAKSVKAYLDCVSOAKTEAEKKECEKLLTPEARKKLEEQQALDCL
LKNAKTEADKKRCVKDLPKDLQKKVLAKESLKAYKDCVSKARNEKEKKECEKLLTPEAKKLEEEAKSVKAYLDCV
SOAKTEAEKKECEKLLTPEARKKLEEEAKESVKAYKDCVSKARNEKEKKECEKLLTPEAKKLEEQQVLDCLKNAKTE
ADKKRCVKDLPKDLQKKVLAKESVKAYLDCVSRARNEKEKKECEKLLTPEAKKLEEEAKESLKAYKDCVSOARNEE
ERRACEKLLTPEARKKLEEQEVKKS I KAYLDCVSRARNEKEKKECEKLLTPEARKFLAKQVLNCLKAGNEEERKAC
LKNLPKDLQENILAKESLKAYKDCVSOARNEEERRACEKLLTPEARKKLEEQEVKKS VKAYLDCVSRARNEKEKKEC
EKLLTPEARKFLAKELQKDKAIKCLKNADPNDRRAIMKCLDGLSDEEKLKYLQEAAREKAVADCLAMAKTDEEKR
KCQNLYSDLIQEI QNKRTQNKQNLQSKTERLHQASECLDNLDDPTDQEAIEQCLEGLSDSERALILGIKRQADEVD
LIYSDLRNRKTFDNMAAGYPILPMDFKNGGDIATINATNVDADKLASDNPIYASIEPDIQYETEKTIKDKNLE
AKLAKALGGNKDDDKESKKSTAEAKAENKIDKVAETAKNISEIALKNKKEKSGEFVDENGNPIDDKKAEKQ
DETSVPKQAFIGKSDPTFVLAQYTPIEITLTSKVDTLITGIVSGVAKDVWNMNGTMILLDKGTKVYGNYSVKGG
TPIMTRLMIVFTKAITPDGVIIPLANAQAAGMLGEAGVDGYVNNHFMKRIGFAVIASVNSFLQTAPIIALDKLIG
LGKGRSERTPEFNALGQAINGSMQSSAQMSNQILGQLMNI PPSFYKNEGDSIKILTMDIDFSGVYDVKITNKS
VDEIIKQSTKTLREHEEITTSFKGKN

"X" can be any amino acid.

Seq ID 227

VKCFLSIFSFLTFGLSLNGTEVVITL EPALKAIQADAQAKQKTAQAEKAEQAQSSAKEKAIQAQIEGELRTQLA
TMSAMLGANGVINGVNGMTGGFFAGSDILLGVMEGYSSALSALGGNVKMI VEKQKINTQTEIQNMQIALQKNNEI
IKLMNQNALLEALKNSFEPSTLKTQMEMLSQALGSSSDNAQYIAYNTIGIKAFETLKGFTWLKVAMQKATL
IDYNSLTGQALFQSAIYAPALSFFSSMGAPFGI IETFTLAPTCKPYLDGLKISACLMEQVIQNYRMIVALIQNKLS
DADFQNIAYLNGINGEIKTLKGSVDLNLALIEVAILNAENHNLNYIENLEKKADLWEEQLKLERETTARNIASSKVIV
K

Seq ID 228

MAGTQAIYESSSAGFLSEISSIISSSTSGVAGPFAGIVAGAMSAIIPIVVGFTNPQMTAIMTQYNQSIABAVSMMPM
 KAAHQYQYLYQGFNDQSMAGVNNILNISKLTFEFTVQGNTOGAQISAVNSQIASILASNTTPKNPSAIEAYATNQ
 IAVPSVPTTVEMMSGILGNITSAAPKYALALQEQLRSQASNSMNDTADSLDSCALGALVGSSKVFSSCMQISMT
 PMSVSMPTVYAKYQALXTNALTSGTNPMTTPACPIGDKVLAVYCYAEKVAREILREYYIEFVKNNNTNLLQNASQMIL
 NQSGLATSTYDTQAISSNLSLYNNIVANKSFLKSHLTLYLDYIKNKLKGQKDSYLTERTVQTKIIVK
 "X" can be any amino acid

Seq ID 229

MKTNFYKIKLLFAWCLIIIGMFNAPLNADQNTDIKDIPEDMALNSVGLVSRDQLKIEIPKETLEQKVAVLNDYNDK
 NVNIKFDNISLSGSFPNDNLGINAMWGIQNLMSQMMGDYGFNNPFMYGYAPTYSOSSFLPPILGY

Seq ID 230

VFVASKQADEQKKLVIEQEVQKRQFKKIBELKADMQKGVNPFVKVLFDDGGRNLFGLFPETFIYSSIFILFVTIVLSV
 ILFQAYEPVLIVAIIVLVALGFKKDYRLYQRMERAMKFKPFLFKGVKNKAFMSIFSMKPSKEMANDIHLNPNRE
 DRIVSAANSYLANNYECFLDDGVILTNNYSLGLTIKLGIDFLTTSKKDLIELHASIYSVFRNFVTPFEKFPYFHTV
 KKKIVIDEETNRDYSLIFSNDFMRAYNEKQKRESFYDISFYLTIEQDILLDTLNEPVMNKKHFADNNFEEFQRIIRAK
 LENFKDRIELIEELLSKYHPIRLKEYTKDGVISYKQCEFYNFLVGMNEAPFCNRKDLYLKEKMHGGVKEVYFANK
 HGKILNDDLSEKYSATIEISEYAPKSQSDLFDKINALDSEFIFMHAYS PKNSQVLKDKLAFTSRRIISGGSKEQG
 MTLGCLSELVNGNDITLGSYGNLSVLFADSFEEKMQSVKECVSSILNAKGFLANAATFSMENYFFAKHCSFITLPI
 FDTVSTNNFADFIAMRAMSFDGNQENNAWGNVMTLKEINSPPYLFNFHMPDFTGSASAGHTLILGSTGSGKTVFMS
 MTLNAMGQFVHNF PANVS KDKQKLTVMYMDKDYGAYGNIVAMGGEYVKIELGTDGLNPF AWAACVQKTNAITMEQK
 QTAISVVKELVKNLATKSDEKDENGNSISFSLADSNTLAAAVTNLTITGDMNLDYPITQLINAFGKDHNDPGLVAR
 LAPFCKSTNGEFQWLFDNKATDRDLDFSKTIIGVDGSSFLDNDVSPFICFYLFARIQEAAMDGRFRVLDIDEAWKYL
 GDFKVAIFYVDRMLKTARKRNAIVRLATQSIITDLLACPIADTIREQCPTKIFLRNDGNNLSYQRLANVTEKEFEI
 TKGLDRKILYKQDGSPSVIASFNLRGIPKEYLKILSTDTVFVEIDKIIQNHSIIDKYQALRQMYQOIKEY

Seq ID 231

LINNNNSKKLRGFFVKVLLSLVVFSSYGLANDDKAEKKEVLEKEKNTPNGLVYTNLDFDSFKATIKNLKDKKVTFK
 EVNPDIIKDEVFDFVIVNRVLKKIKDLKHYDPIEKIFDEKKGEMGLNVELQINPEVKDFFTFKSISTTNKQRCFL
 SLRGETREILCDDKLYNVLLAVFNSYDPNDLLKHISTVESLKKIFYTITCEAVYL

Seq ID 232

MTNETIDQTRTPDQTSQTAFTDPQQFINNLQVAFIKVDNVVASFDPDQKPIVDKNDNRDNRQAFDQGISQLREEFSNK
 AIKNPTKKNQYFSDFIDKSNLDLINKDNLIDVESSTKSQKFGDQRYQIFTSWSVSHQKPSKINTRSIRNFMENTIQ
 PPIPDDEKAEFLKSAKQSFAGIIIGNQIRTDQKFMGVFDESLEKERQAEKNGGPTGGDWLDFLSFIFNKKQSSD
 VKEAINQEPVPHVQPDIAITTTDIIQGLPPEARLDDERGNFSKFTLGDMEMLDVEGVADIDPNYKFNQLLIHNNAL
 SSVLMGSHNGIEPEKVSLLYAGNGGFGDKHDWNATVGYKDQQGNVATLINVHMKNSSGLVIAGGEKGINNPSFYL
 YKEDQLTGSQRALSQEEIRNKVDPMFELAQNNTKLDNLSEKEKEKFQNEIEDFQKDSKAYLDALGNDRIFAIVSKKD
 TKHSALITEFNNGDLSTLKYGKKADKALDREKNVTLQGSLLKHDGVMFVDYSNFKYTNASKNPNKGVGATNGVSH
 LEAGFNKAVFNLPLNLAITSFVRRNLENKLTAKGLSLQEAANKLIKDFLSSNKELAGKALNFNKAVAEAKSTGN
 YDEVKKAQKOLEKSLRKEHLEKEVEKKLESKSGNKNKMEAKAQANSQKDEIFALINKKANRDARAIAITQNLKGI
 KRELSDKLEKISKDLKDFSKSFDEFKNGKNKDFSKAETLALKGSKVDLGINPEWISKVENLNAALNEFKNGKNK
 DFSKVTQAKSDLENSVKDVIINQKVTDKVDNLNQAVSVAKAMGDFSRVEQVLADLKNFSKEQLAQQAQKNEDFNTG
 KNSELYQSVKNSVNKTILVGNLSGIEATALAKNFSIDIKELNEKFNFNNNNGLKNSTETIYAKVNKKKTGQVAS
 PEEPIYTQVAKKVNKIDRLNQIASGLGGVGQAAGFPLKRHDKVDLDSKVGLSASPEPIYATIDDLGGPFPLKRHD
 KVDDLKSVGRSRNQELAQKIDNLNQAVSEAKAGFFGNLEQTIDKLKDSKKNVNMLYVESAKKVPASLSAKLDNYA
 INSHTRINSNIQNGAINEKATGMLTQKNPEWLKLVNDKIVAHNVGSVSLSEYDKIGFNQKNMKDYSDFSFKFSTKLN
 NAVKDIKSGFTHFLANAFSTGYCLARENAEHGINKVNTKGGFQKS

Seq ID 233

VAINTFLKHSFLVCLLAVNSYAFDWNIFKYNLGFNMFMIDHEGSTPIYVNTNTNLKTRLTNPFGIQFYTRGVEQSL
 TVGAYFFQNFHNYSTNFPYRWGPTMYKARGKRFTFYGGIFPRKNLLGRYGLNIFAPYYWFIDPNARGFLLQFQNH
 YSPSKPYYGHAEFMLDWFGGNCYNTCKFGRNPYGAMDRFQMNGSVAYNFFKDLLGIGGYFVLFHNEKYLNGAD
 GMQFNEKKAIDNSAIYLLDRLYYNAYTISTLLDIAPFMEKLSAKFGMVSEASRLRNREKEVFFINSVGGQFDVEIQ
 YKGGFIHNLFFFAKTPEMPFYNYQYVEMYCTPSYCPTPIYRGVFFQANMYNRFDFYNNWKNDFFASVRINFVLNA
 MRGGFDRSLPWSSESYQVYMTVAFDPNYLINKLARKK

Seq ID 234

MMIFIDACFRKETPYTPIWMMRQAGRYLSEYQESRKAGSFLELCKNSDLATEVTLPVEILGVDAAILFSDILV
 PLEMGLNLEFIPKKGPHLETITDLKSVESLKVGAQYQNLNYVDYDTISQTRQKLSREKALIGFCGSPWTLATYMI
 EGSKSYAKSKMLYSEPEVLKALLEKLSLELIEYLSLQIQAGVNAVMIFDSWASALEKEAYLKFSWDYLLKISKEL
 KKRYAHPVILFPKGIGAYLDSIDGEFVDFGVWDGTPLTAAKKILGGKYVLQGNLEPTRLYDKNALBEGVETILKV
 MGNQGHIFNLGHGMLPDLPRENAKYLVQLVHAKTRR

Seq ID 235

MYKTAINRPITTLMFALAIVFFGTMGFKKL SVALFPKIDLPVTVVTTTYPGASAEIIESKVTDKIEEAVMGIDGK
 KVTSTSSKNVSIIVIEFELEKPNBEALNDVVKNISSVRFDSDNIKKPSINKFDTDSQAIISLVSFSSSSVPATTLND
 YAKNTIKPMLQKINGVGGVQLNGFRERQIRIYANPTLMNKYNLTADLFSTLKAENVEIDGGRIVNSQREFSILIN
 ANSVSVADVEIKIQVGNHVRGLDAKIEIGLEEDNTFASFDDKPGVILEIQKLAGANEIEIVDRVYEALKRIQAIISP
 NYEIRPFLDTTGYIRTSIEDVKFDLVLGAILAVLVVFAFLRNGTITLVSAISIPISIMGTFFALIOWMGFSLNMLTM
 VALTLAIGIIIDDAIVVIEINHHKLEMGMSSKRKASYEGVREIGFALVAISAMLLSVFVPIGNMKGIIIGRFQSGFI
 TVALAIALSYVVVVVTIIPMVSSVVVNPRHSRFYVWSEPFKALESRYTKLLQWVLNHHKIIISIAVVLVFGSLFVA
 SKIGMEFMLKEDRGRFLVWLKAKPGVSIIDYMTQKSKIFQKAEKHAEVEFTTLQVGYGTTQNPFFKAKIFVQLKPLK
 ERKKEHQLGQFELMSVLRKBLRSLPEAKGLDITNLSEVTLIGGGGDSPPQTFVFSHSQEAVDKSVENLKKFLLES
 PELKGGKVESYHTSTSESQPQLQLKILRQNKYGVSAQTIGSVSSAFSGTSQASVFKEDGKEYDMIIRVPDDKRV
 SVEDIKRLQVRNKYDKLMLFDALVEITETKSPSSISRYNRQSVTVLAEPNRNAGVSLGELTQVSKNTKEWLVEG
 ANYRFTGEADNAKESNGEFLVALATAFVLIYMLAALYESILEPFIIMVTMPLSFSGAFALGLVHQPLSMFSGMITG
 LILLIGMVGNATLLIDVANERKKGLNITQEAIFAGKTRLRPIILMTTAMVCGMLPLALASGDGAAMKSPIGLAM
 SGGMLISMVLSLLIVPVFVYRLAPIDDKIKRFYQNKQKTL

Seq ID 236

MKKVLIINGAKAFGSSGGKLNFTLTDHAKKTLESIGLEVDTTIVDKGYEHAQEVEKVSADATIWMQPGWWMGEPW
 IVKKYIDEVFSVGHGKLYASDGRSSQNPTKNYKGGMLQGGKMYLSLTWNAPIEAFNDPSEFFEGVGVDVYVLHLH
 KAFQFLGLSALPTFICNDVVKNPQVEQYLSLTLHLRQAFGK

Seq ID 237

LVFVFLFKCVNEETSLNFTPLLERMACNLQARFYSVKDNTTSFYLOASAETTFEFAQKLSEILPFSLDFSFLSLK
 EITEPLDENLFTASLSKPLFMNAKEHQDFLDKNSSLYADTLGLIKNTAFKGDIIHSPKELIDCLTQLKGMKLTQD
 FIPITFSREALSLSLKNPSPSVIFSDLSVLSCTKLPLEDAKYLASLEKPSIKAPLKSVMKDTFKNDEIIAQLPYD
 PIIINLLCHILQDEGIEFVFMHESRSCBALLYEALFKTPKRLITPTKKFVLENNFSTFPFKDELEFLSATPNSIVL
 YLSFKRPTRLILLHANGSLKTLSSVSFDFNKMFNALKQDEKASRMLQNYATKFPDFYARIVELSKYDLGGANLLDFF
 CILGFLVGYSEDFTQSVIPLAKECLRPKGPRIDYKILKDNLSKLMALNFSKIMHSAMSFRLAGVENEILSLGILDS
 LAEFLGNFIWDNAQNFSVQEVTTIAGDFFGEKVFLDLFVRYFPKTLALKTHAFLDYE

Seq ID 238

IKKLILSSLVFACINTSVEALENDGSKPNDLTSPKEASQESQKNEAPKNEVORNEAQKETPQSNQTPKEMKVKSIS
 YVGLSYMSDMLANEIVKIRVGDIIVDSKKIDTAVLALFNQGYFKDVYATFEGGILEFHFDEKARIAAGVEIKGYGTEK
 EKDGLKSQMGIIKKGDTFDEQKLEHAKTALKTALEGQGYGSVVEVRTEKVSEGALLIVFDVNRGDSIYIKQSIYEG
 SAKLKRMIIESLSANKQRDFMGWMLNDGKLRDLQLEYDSMRIQDVMMRGYLDHAHSSPFLKTDFTSHDAKLHY
 KVKEGIQYRISDILIEIDNPVPLKTLKALKVKRKDVFNIEHLRADAQILKTEIADKGYAFVVKPDLDKDEKNG
 LVKVIYRIEIVGDMVYINDVILSGNQRTSDRIIRRELLLGPKDKYNLTCLRNSENSLRRLGFFSKVKIEEKRVNSSL
 MDLLVSVEEGRTGQLQFGLGYGSYGGMLNGSVSERNLFGTGQSMSTYANIATGGGRSYPGMPKGAGRMFAGNLSL
 TNPRIFDWSYSTINLYADYRISYQYIQGGGGFGVNVGRMLGNRTHVSLGYNLNVTKLLGFSSPLYNRYSSVNEV
 VSPRQCSTPASVITINRLSGGKTPLPESCSSPGAITTSPEIRGIWDRDYHTPTISSFTLDVSDYNDTDDYFFPRNGV
 IFSSYATMSGLPSSGTLNSWNLGCVNRNTKVYGFKAAYHHLQKYLIDLIARFKTQGGYIFRYNTDDYLPINSTF
 YMGGVTTVRGFRNGSVTPKDEFGWLGGDGIFTASTELSYGVLLKAAKMLAWFFDFGFLTFTKTPTRGSFFYNAPVT
 TANFKDYGVIGAGFERATWRASTGLQIEWISPMGPIVLIFPIAFFNQWGDNGKCKGGLCFNPNMDDYTQHFEFSM
 GTRF

Seq ID 239

MRKIFSIVLKALLFIGIVYAEPESEKVEALEGRKQESSLDKKIRQELKNKDLKNKELKNKKEKNTTEKKETKAKR
 KPRAEVHGGDTKNPTQKITPPKIKENAKGVQNGVQSNAPKLEEKDTTSQTEKKGASPSQFNSIFGNPNDAANN
 TLEDKVVGGISILLVNGSPITLYQIQEEQESKSVSKAQARDRLIAERIKNQEIERLKIHVDDDKLDQEMAMMAQQQG
 MDLDHFQMLMAEGHYKLYRDQLKEHLEMQELLRNILTNVDTSSSETKMRFEYNNKHKEQFSIPTETVRYTSTNQ
 EDLERAMADPNLEIPGVSKANEKIEKMTLNPOIAQVFISHEQGSFTPMNGGGGQFITFYIKEKKGKNEVSFSQAK
 QFIAQKLVEESKDKILEEHFEKLRVKSRIVMIRE

Seq ID 240

MLSVIILAAAGKGTMRSSLPKTLHTICGEPMLFYILETAFSISDDVHLILHHQKERIKEAVLERFKGVIFHTQIVE
 KYSGTGGAIMQDKTPISTKHERVLIILNADMPKITKDALAPLLESKNNAIGLLHLADPKGYGRVVLNHHQVKKIVE
 EKDANDEEKEIKSVNAGVYGFERDFLEKYLPLKLDQNAQKEYYLTDLIALGINENETIDAIFLKEECFLGVNSQTE
 RAKAEIIMLERLRKNAMDLGVVMQLPNSIYLEKGVSFKECVLEQGVRLIGNCLIENAHIKAYSVIEESQIVNSSV
 GPFAHARPKSVICNSHVGNFVETKNAKLQGTAKAGLSYLGDCIEGKNTNVGAGVITCNVDGKKKHQTIIGENVFIG
 SDSQLVAPINIGSNVLIGSGTTITKDIPSGSLSLSRAPQTNIEGYFKFFKKP

Seq ID 241

MKEITIALVGQPNVKGSSILINALSNAHLKVGNFAGVTVDKMEVGLIHKEHQITIIDLPGTYALNDFTTTEKVTKDF
 LEKGQYDLILNVVDSTNLERNLALSAQLLDTNKMLLALNMWDEAQKEGIKINTEKLSKELGVVCVPTSARSKEDR
 LNTLELLDEIVRLYSQNTTNNENIKVPSQSFKESLKYSQSAQRIALVISENQONASFEHTYKIDKILMHKRYGIF
 IFLGFMFIIFSLSLIGGGVQKALETGFKFLSDGIKENVANEDLASLVGDGIIGGVGATVSFLPLIVVLYFGISLL
 ETTGYMSRVAFLLDGILHKFGLHGKSFIPITITGFGCSVPAYMATRTLQNYNERLITLFVIGFMSCSARLPITYVLV
 GSFFPSSSAGFVLFICIYILGAVVALMAKLLKLSVFKGQTESFIMEMPKYRFPSSWRMVYFSIYTKSLSYLKKAGTY
 ILVGAILIWFMSQYPKSDAAMKAYQESLLVNKDTTSLSEAKEKELKELKTELDKKNLKNKSVGRGGAYLEKVFS

MDFDWRLSVSLVTGFMKEVSVSTLGVLSLGDQNEKSDAFRGILRKEVSVPSGIAFIVFVMFYIPCFATITFGR
EAGGIKFVAYLFIPTTVVAYAFSLIAPYATQILV

Seq ID 242

MANLLKNGKTKQARDEILARTEKTGHYNGLKKLEFKERDPIGYEKMFSKLRGGIVHARETAKRIAASPIVEQEGE
LCFTLYNAVGDVLTSTGIIHVGTMGSAIKYMNENNEDNPGINDKDIFTNNDCAIGNVHPCDINTLVPIFHDEK
LIGWVGGVTHVIDTGSVTPGSMSTGQVQRFQDGYMITCRKTGANDESFQDLWLESQRSVRTPKYWLDERTRIAGC
HMIRDLVMEVIKEDGIDSYMRFIDEVIEGRRGLISRIKSMTIPGKYRKVAFVDVPYAHKDIGVCSEFAKLDTIMH
SPVEITINKDATWKLDFDGASRWGWSFNQCNQVSFTSGIWMVTOTLIPTSRINDGAYFATQFRLKKGTTWMNPD
RTGHAYAWHFLVSGWSALWRGLSQAYYSRGYLEEVNSGNANTSNWLQGGGINQDGEIHAVNSFETSSCGTGACAIK
DGLNHAAAIWNPEGDMGDVEIWEMAEPLLYLGRNVKANTGGYKRGNGFETLRMVWGAHDWTMFFMGNGYMNND
WGMMGGYPAASGYRFAHNTDLKNRIKNNASLPLGGDFNPTRDYEKHISHASQVKRDKQCITTENCDFNDYDLYLN
YIKGGPGFGDPIDRLNAILDLNSKQLPEYAYKVYGA VVSQNKDGVWVGDEAKTKARRKBELENKARSIPVKQ
WMEQERNAILEKEASKQVKHMYATSFDLSPKFLNDFKTFWNLPKNWSVKEDELGVFTYGSKYRMDLSKLPDVRTVL
LVDEK

Seq ID 243

MQDNSVNETKNIVEVGIDSSIESYLA SMSVLIIGRALPDARDGLKPVHRRILYAMHELGLTSKVAYKKSARIVGD
VIGKYHPHGDNAVYDALVRMAQDFSMRLELVGQGNFGS IDGDNAAMRYTEARMTKASEBILRDIDKDTIDFVFN
YDDTLKEPDILPSRLPNLLVNGANGIAVGMATSIIPHRMDEIDALVHLENPNAGLDEILEFVKGPDPFTGGIY
GKAGIIEAYKTGRGRVRAKVHVEKTKNKEIIVLDEMPFQTNKAKLVEQISDLAREKQIEGISEVRDESREGIR
VVIELKRDAMSEIVNLHLYKLTMTTTFIILLAIYNKEPKIFTLLELLHLFLNHRKTIIRRTIFELEKAKARAH
ILEGYLIALDNIDEIVRLIKTSQSPEAAKNALMERFTLSEIQSKAILEMRLQRLTGLERDKIKEEYQNLLELIDDL
NGILKSEDRNGVVKTELLEVEKEQFSSPRRTEIQESYENIDIEDLIANEPMVVSMSYKGYVKRVDLKAYEKQNRGG
KGKLSGSTYEDDFIENFFVANTHDILLFITNKGQLYHLKYKIPEASRIAMGKATVNLISLAPKSTMTLSTKDF
SDERSLAFFTKNGVVKRNTLSEFESNRSCGIRAIIVLDEGDELVSQVVDKNKHLIASHLGIFIKFPLEEVREIG
RTRRGVIGIKLNENDFVVGAVVISDDGNKLLSVSENGLGKQTLAEAYRGQSRGGKVGIGMKLTQKTGNLVGVISVD
DENLDMILTASAKMIRVSIKDI RETGRNASGVKLINTADKVMYVNSCPKEEPEENLETSSAQNLF

Seq ID 244

MEFMKKFVALGLLSAVLSSSLLAEGDGVYIGTNYQLGQARLNSNIYNTGDC TGSVVGCPPLTANKHNPGGTNINW
HAKYANGALNGLGNVGYKKFFQKSFDMTSKWFGFRVYGLFDYGHATLGKQVYAPNKIQ LDMVSWGVGSDLLADI
IDNDNASFGIFGGVAIGNTWKSSAANYWKEQII EAKGPDVCTPTYCNPAPYSTKTSTVAFQVWLNFGVRANIYK
HNGVEFGVRVPLLINKFLSAGPNATNLYHLKRDYSLYLGYNYTF

Seq ID 245

MAILRANLSPKNKLNATLKGWLPILQSELEDLEEVLKQNALDNPLIKIENKRIKNFSDRFSAKKSSDHLENFATAS
KSLPFTLEAQIIPPLPFTETSQKIAMDIIISGLNNEGYFEENIEERARILGVESEVYEKVRKRFSYLNPAIGAKDV
KESFLFQLESRELDNELYEETRKIILNLEKHHEFSKDFYIEKALKILKSFKNPPAIEFLEKEIEVIEPFIIVEVD
NGIIVRLNDESYPTISLEENRFKDSGYLKEKLEKALIDALNLRKATIYKIGLMLLEYQYDFFKGKELRPLKLLD
LANEFNHSVSTISRASNKYLACERGVFPIKHFFSIALDNSETSNVIAKDYLLLELIKNEKKEPLSDAKILELIEE
KFHLKMRRTITKYRQLNLIASSSERKRLYLMRA

Seq ID 246

MQVLALKYRPHKFSSELVQGESVAKTSLSLALDNQRLANAYLFSGLRGSGKTSSSRIFARALMCEEKPAVPCDTCIQ
CQSALNNHHIDIIEMDGASNRGIDVRLNIEQTRYKPSFGRYKIFIIDEVHMTTEAFNALLKLTLEPPSHVKFLL
ATTDALKLPAITLSRTQHFRFKKIPENSVISHLKLTILEKEQVSYETSALEKLAHSGQSLRDTITLLEQAINYCDN
AITESKVAEMLGAIDRSVLEDFQSLINQDEARLKERYAILENYETESVLEEMMLFLKAKLLSPDFYSILLIERFF
KIIMSSLSLLKEGANASVLLLLKMKFKEALKFKALDDAILELEQTPFNQNPSSISYNAPKQESKNIEKREKIEQIE
RIEGTEKREKLEKKEAFTPQTFMLSAKDRIFHNLFKQVQTLVYERNYELGAVFEKNIRFIDFDSQTKTLTWESLA
TDKDKELLRERFKIVKSI VDGVFKGESIKALKNHSENKSTLEVVKELKFPYKPKPTTETTAETKEKETKEKEI
QENDTKEIQEVQPKQAPTALQEFMANHSELIEIKSEFEIKSVELL

Seq ID 247

MRIFLKLILLFLCKGQVMAQNLP TIALLATGGTIAGSGASASLSYKSGELGIKELLKAIPSLNRLARIQGEQIS
NIGSQDMNEEVWFKLAKRAQELDDSRIOGVVITHGDTLLEESAYFLNLVLRSTKPVVLVGAMRNAASLSADGALN
LYNAVSVALNEKSANKGVLVVMDNIFSAREVIKTHTTHTSTFKALNSGAIGSVYGYKTRYMQPLRKHTTESEFS
LSQLKTPLEKVDIIYTHAGMTPDFQASLNSHAKGVVIAVGNGVNSAGFLKAMQEASQMGVVIVRSSRVNSGEIT
SGEIDDKAFITSDNLNPQKARVLLQLALTKTNNKEKIQEMFEY

Seq ID 248

MDFKNKKWLFAPLAGYTDLPPFRSVVKKFGVDVTTSEMVSSHSLVYAFDKTSKMLEKSPLEDHFMAQISGSKESV
KEAVEKINALEHVNGIDFNCGCPAPKVANHNGSGLLKDLNHLVKLLKTIRENTSKKITSVKVRLGFEEKIPKEIA
HALNDAPVDYVVVHGRTSDKYQDKIDYIESIALMKKILKPKVIANGELDSVKKA FEVLQITQADGLMIGRAALRA
PWIFWQIRNNTTKLPVAVVKDLVLEHDFKMFYGDGMGVIMFRKNLHAYAKGEMQASAFRNCVNTLTEIKSMRESI
EEFFNQEMLQSEVPLWVELNQKSV

Seq ID 249

MAIGSLSSGLGSKVLNYDVIDKLDKDADEKALIAPLDKMEQNVEKQKALVEIKTLLSALKGPVKTLSDYSTYISR
KSNVTGDALSASVGVGVPIQDIKVDVQNLAQGDINELGAKFSSRDDIFSQVDTTLKFYTQNKDYAVNIKAGMTLGD
VAQSITDATNGEVMGIVMKTGGNDPYQLMVNTKNTGEDNRVYFGSHLQSTLTNKNALSLGVDGSGKSEVSLNLKGA
DGNMHEVPIMLELPESASIKQKNTAIQKAMEQALENDPNFKNLIAANGDISIDTLHGGSLEIINRRGGNIEVKGSK
AKELGFLQTTTQESDLLKSSRTIKEGKLEGVVSLNGQKLDLSALTKESENTDAIIQAINAKEGLSAFKNAEG
KLVINSKTGMLTIKGEDALGKASLKDGLNAGMVQSYEASQNTLFMSKNLQKASDSAFTYNGVSI TRPTNEVNDVI
SGVNITLQTTTPEPNKPAIISVSRDQAIIDSLTEFVKAYNELIPKLEDTRYDADTKIAGIFNGVGDIRAIRSSLN
NVFYSVHTDNGVESLMKYGLSLDDKGVMSLDEAKLSSALNSNPKATQDFFYGSDSKDMGGRREIHQEGIFSKFNQV
IANLIDGGNAKLKIYEDSLDRDAKSLTKDKENAQELLKTRYNIMADVLPMLIAKSLKPIKNSIPCK

Seq ID 250

MQIATAIWKTRIWQLQTHFDKKEAHLKHLKLEAQHKEFVRDEKRYLEKEKKELEKERQILEQEKENFKKQRAVCKESO
AKALDAMLNMYATKDEIKSMILEQLEEELEAOKSALIRRYEKEAKEEGKKSYAILAEATARFAGNYAAENLTTR
IALPCSDYIGRVIGKDGKNIEAFKKVSGVDIEFSEDSSELCLSSFNLYRREVASETLKILIEDGRIQPNRIEEVYH
RVARNLEKELLSEGESVLELELGAMEDELKILIGKMYRSSFGQNALQHSKEVALLAGLIAEQLGDKKLARRAG
ILHDIGKALTQELGRDHVNLGVEVCKRHKEDPVVINAIYAHHGHEILSVECASVCAADALSAGREPGARRKSDEEY
AKRMQALEBEIALEFDGVEKAYAMESGRELRVIVKSNQVRDQVPIIARKIAKKIEESAQYVGEVGVQVVRRESRFT
TATLKQ

Seq ID 251

MPMRLHTAFFGINSILLVASLLISGCSLFKKRNTNAQLIPPSANGLQAPIYPPNTFTPRKSIQPLPSPRLENNDQPV
ISSNPTNAIPNTPIILTNNVIELNAWAWAWLQNPFFHPLKPWL

Seq ID 252

MENNPNNQASLERNELHNTIWKVANELRGSVDGWDKQYVGLGILFYRISENMTHYINKEERKRDPSPDYAKLSD
EKAERGRKHLIEQKGFPIPPSALFCNALKNACHNEDLNVTLQNI FNEIEKSSLGTPSEENVKGLFADLDVNSNKLK
SSHQNRVEKLTILKLEAIGGMQLGDYLSGIDVFGDAYEYLMAMYASNAGKSGGEFFTPQEVSELLAKITLHGQESV
NKVYDPCCGSGSLLQFSKVLGDKNVSKGYFGQEIINLTYYNLCRINMFLHDINYSKFHIAHGDITLDPKHEDDEPF
DAIVSNPPYSTKWVGDSPILINDERFSPAGVLAPKNAADLAFTMHMLSYSLSNSGTAAIVEFPGLVYRGNAEAKIR
EYLVKENVIDCVIALPDNLFFGTSIATCILVLKKNKQDDTLFIDASKEFVKEGKKNKLKERNREKILQTYIERKE
IKHFCALANIEKIKENDYNLSVNRVVEQEDTKEAIDIKALNSEIAQIVEKQSALNRNRESIIKELEGGQNA

Seq ID 253

MLQNTINTQRYATKKLFENVNIKLDKNKRYGLIGANGAGKSTFLKILSKSIDCSSGEVITITSGMKMGVLGQDQYAF
EDLSLKDAVLIGNKRLYDAIKEKERLYTEGDLSDDKVNARLGELETICVEEDPMYCEVAIEKILEDLGIPSSKH
DLMKTLPSDDKFKILLAQVLFPPKPDILLDEPTNNLDLNAIWELENNLKRHEGTMVVISHDRHFLNAVCTHILDLD
FHSVREFSGNYDDWYIATSLIAKQQAERNKKLKEKEELEKFIARFSANASKAKQATSRQKQLDKLDIQSLAVSSR
RDPSIIFKPKRTIGNEALECENISKSYYDDQIVLNQVSLKVMKDKIALIGPNGVGKSTLCKILVEELKPDKGVVW
GATVSKGYFPQNVSEEISGEETLYQWLFNFNKKIESAEVRNALGRMLFNNGEEQEKCVNALSGGEKHRMVLKXLMLE
GGNFLVLDEPTNHLDLBAIIALGEALFKFDGALICVSHDRELIDAYANRIELVPSPKGASIIDFKGSYEEYLASK
K

Seq ID 254

MNKPFLILLIALIVFSGCNMRKYFKPAKHQIKGEAYFPNHLQESIVSSNRYGAILKNGAVIGDKGLTQLRIGKNFN
YESSFLNESQGFFILAQDCLNKIDKTKNSKVAKTEETELKLGVEAEVQDKVCHQVELISNNPNASQQSIVIPL
TFALSASVKGNLLAVVLADNSANLYDITSQKLLFSEKGSPTTINSLMAMPIFMDTVVVFPMLDGRLLVVDYVHGN
PTPIRNIVISSDKFFNNITYLIVDGNMNIASGKRILSVVSGQEFNYDGDIVDLLYDKGTLYVLTLDGQILQMDKS
LRELNSVKLPSSLNTIVLNHNKLYSLEKRGYVIEVDLNDDFSYNVYKTPITIGSFKFFSSNRLDKGVFYDKNRVYD
RYILDYNDKFKPKLYPVVEKSASKSKQKGEKNAPIYLQERHKAKENQPLEENKVKPRNSGFEEEEEVKTTRPEPIR
DQNNATQQGETKNNESKNAPVLKENAAKKEVPKPNKSKKEERRLKEEKKKAKAEQRAREFEQRAREHQRERDEKELEE
RRKALEMNKK

Seq ID 255

MKRDFIKTTTLGATGAVLGAQILQAEESKGSVAKYKIEAQYSIDFDSAHTSLFIPMPSVVASNVHLQGNHASYK
SMLNFGVPYQLQVDFLKSTQKKQVHLSYEIASYQLNERLFETSDFVAMGRYERDDASVANIANQLKGTTPKESVRNF
YAFIKHEMPKRQKALEGKENLPKRESLPWFATISKESMFVSLCHACGKSAEVQGLKLGQNSVVKNAPRVEVYLKD
SFLAFDFQNNHKEVFIPLNRHKMDQLDSALLATFGDAFALVDGRDLGNYESKLFKRVSTIV

Seq ID 256

MVNKDVKQTTAFGAPVWDDNNVITAGPRGPVLLQSTWTFLEKLAADFDRERIPERVVHAKGSGAYGTFVTVDITKYT
KAKIFSKVGKKTECFRSTVAGERGSADAVRDPGRFAMKYYTEGNWDLVGNNTPVFFIRDAIKFPDFIHTQKRD
PQTNLPNHDMVWDFWSNVPESLYQVTWVMSDRGIPKSFHMDGFGSHTFSLINAKGERFVVKFHFHTMQGVKHLTN
EEAAEFVKYDPPDSNQDRLFNALAGDFPKWKLSIQVMPEDAKYRFHPFDVTKIWIYLDQYPLMEVGIVELNKNPE
NYFAEVEQAASFANVVPVGIYSPDRMLQGRFLSYGDTHTYRLGVNYPQIPVKNPCPFHSSSRDGYMONGYYSGL

QNYTPSSSLPGYKEDKSARDPKFNLAHIEKEFEVWNWDYRADDSDYYTQPGDYRSLPADEKERLHDTIGESLAHVT
HKEIVDKQLEHFKKADPKYAEVGVKALEKHQKMMKDMHGKDMHHTKKKK

Seq ID 257

MFLRVYPKLRVALCFPLLAETCYSEERTLNKVTTQAKRIFTYNNFEKVTSKELDQORSNEVKDLFRTNPDVNVGGG
SVMGQKIYVRGVEDRLLRVTVDGAAQNGNIYHHQGNFTVIDPGMLKSVEVTGAANASAGPGAAGVVKMETKGAAD
FIPRGKNYAASGAVSFYTNFGDRETFRSAYQNAHFDI IAYYTHQNI FYRSGATAMKNLFNPTQADKEPGTPSEQN
NALIKMNGYLSDRDRTLTFWNMTTRDNATRPLRSNAIGLAYPCEAPFSPDSSQGCNPVLDSTFRMYHSINSANNLS
LQYKREAGNSFGDPRLDFTLYTSIRNAQFDPLFDPNGVYAKFPTSLASAWEKENYPCVEGAYCTPSFSDVDKPPSSQ
PRNLFNNTGLNLKVAHVIDEATDSLFEYGFNYQNLVDFDARI PKSELYRPNQVYTDKQKQIACSLVNNNPNNDP
TLQCRGKANGNIYGGYVQANYS PHKIITFGAGVRWDAYTLYDKDWNHRYTQGFSPSAALVLSPIEPLSLKITYSQV
TRGVMPGDGVYMRQNDLRYAKNIKPEVGSNAEFNIDYSSQYFSGRAAFYQALDNFISQYAQNLIVTNLSQAIRIY
GYEVGGTFRYKGVSLNVGVSRTWPTTRGYLMADSYELAASTGNVFI IKLDYTI PKTGINLAWLSRFVTGLDYCGFD
IYLPDYGTAEKPKTPTDLAKCGSQLGLVHMHKPGYGVSNFYINWSPKTKSRWKGLLLSAVFNNVFNKFYVDQTSFY
VMSPPDMPGTDVAKRAIAEPGFNARFEVAYKW

Seq ID 258

MEIQQTHRKINRPLVSLALVGALVSITPQQSHAAFFTIVII PAIVGGIATGAAVGTVSGLLGWGLKQABEANKTPD
KPKDKVWRIQAGKGFNEFPNKEYDLYRSLSSKIDGGWDWNAATHYVWKGQWNKLEVDMDKDAVGTYNLSGLRNF
GGDLNVNMQKATLRLGLQFNGNSFTSYKDSADRTTRVDFAKNILIDNFLEINNVRVSGAGRKASSTVLTQASEGI
TSSKNAEISLYDGCATLNLASNSVKLMGNVWMLRLQYVAYLAPSYSTINTSKVTGEVNFNHLTVGDHNAQAQIIA
SNKTHIGTLDLWQSAGLNI LAPPEGGYKDKPKDKPSNTTQNNANNQONSAQNNSNTQVINPPNSAQKTEIQPTQV
IDGPFAGGKDTVVNIDRINTNADGTIKVGGYKASLTNAAHHLHIGKGGINLSNQASGRITLLVENLTGNITVDGFLR
VNNQVGGYALAGSSANFEFKAGTDTKNGTATFNNDISLGRFVNLKVDHAHTANFKGIDTGNNGGFNTLDFSGVTGKVN
INKLITASTNVAVKFNINELVVKTNVSVGEYTHFSEDIGSQSRINTVRLTGTSTRSIFSGGVKFKSGEKLVIDEF
YSPWNYFDARNIKNVEITRKFASTPENPWGTSKLMFNNTLGLQNAVMDYSQFSNLTIOGDFINNQGTINYLVRG
GQVATLNVGNAAAMFFSNVDSATGFYQPLMKINSADLIKNKEHVLLKAKI IGYGNVSLGTNSISNVNLIBQFKE
RLALYNNNNRMDICVVRNTDDIKACGTAIGNQSMVNNPDNYKYLIKAWKNIGISKTANGSKISVYVLGNSTPTEK
GGNTTNLPNTTNSNRSANALAQNAAPFAQPSATPNLVAINQHDFGTIESVFELANRSKDIDTLYANSQAQRDLL
QTLIDSHDAGYARQMDNTSTGEITKQLNAATTLNNTLASLEHKTSSLQTLNLSNAMILNLSRHTNID
SFAQRLQALDKQKFASLESAAEVLYQFAPKYEKPTNWNANAIGGTSLNNGGNASLYGTSAGVDAYLNGEVEAIVGG
FGSYGYSSFNQANSLSNGANNTNFGVYSRIFANQHEFDFEAQALGSDQSSLNFKSALLRDLNQSYNVLAISAAT
RASGYDFAFFRNALVLKPSVGVSYNHLGSTNFKSNQVALKNGSSSQHLFNASANVEARYYYGDTSYFYMNAGV
LQEFANFGSSNAVSLNTFKVNAHNPLSTHARVMGGEKLKAKEVFLNLGFVYLHNLSNIGHFASNLGMYRSF

Seq ID 259

MPQIQSSHSNHFDFTIDTADRTKLLMSYLVVPTTANFNVMHGGELLNLLDKVAYVCSTRYCAKGTVTLSDGVTF
KYPFVGNLLTFLASINYVGNSTCEVGIKVLSEDIKTREITHTNSCYFTMVAVENGKPTPMPKYEKTEVEIRRYE
GALKRKEMRTRGYLKSGKHEGV

Seq ID 260

LNNLDIKTLGQVFTPKKIVDFMLTLKHNHGSVLEPSAGDGSFLKRLKKAVERIEIDPKICPKNALCMDFDYPLENQ
FDTIIGNPPYVKHDIAPSTKEKLYSLFDRSNLYLFFIEKAIKHLKPKGELIFITPRDFLKSTSSVKLNEWIYK
EGTITHFFELGDQKVFNPAMPNCVIFRFCKGNFSRITNDGLQFLCKKGILYFLNQSYTQKLSEVFKVKVAVSGCD
KIFKNEKYGNLEFVTSITKRTNALEKMFVNENPDYLLQHKDLSLMQKIKKFNENNWFQWGRMHHSIPKKRIYVNA
KTHQKNPFFIHQCPNYDGSILALFPYNQNLDLQNLCDKLNAINWQELGFVCGGRFLFSQRSLENALLPKDFLNLG

Seq ID 261

MKQNLKPFKMIKENLMTQSQKVRFLAPLSIALSLSFNVPVGAEEEDGGFMFTGYELGQVQVQVKNPGKIKAEELAGLL
NSNTTNTNTNTNIAGTGGNVAGTLGNLFMNQNLGDLIDLYPILNTKNIHQCGTTNNGSSSATTAAATTNNGLCFQGNL
DLYNEMVGSIKTLSQNI SKNIFQGNNTTSQNL SNQSELNTASVYLYTMNSFLNANNQAGGIFQNNNTNQAYGNV
TAQQIAYILKQASITMGPSGDSGAAAFLDAALAHVFNSANAGNDLSAKEFTSLVQNI VMNSQNALTLANNANIS
NSTGYQVSYGGHIDQARSTQLLNNTTNTLAKVTALNNELKANPWLGNFAAGNSSQVNAFNGFITKIGYKQFFGENK
NVGLRYYGFFSYNGAGVGNPPTYNQVNLTYGVGTDVLYNVFSRSFGSRSLNAGFFGGIQLAGDITYISTLNSPQL
ANRPTATKQFLFDVGLRMNFGILKKDLKSHNQHSIEIGVQIPTIYNTYYKAGGAEVKYFRPYSVYVWYGYAF

Seq ID 262

MAFKKARLISKFISKGSFKLNKISKKIIFTLNQILKCEKPLKRHKALKPIKKLSNRNKSFLKASVLLIGALGGLSH
LRANECRYWSWSSWSYQDNIESGPNSTHNSYCLFSSTQSGTYLNTLTYSAGGASFTQKFNNGTNLVGENIRF
GGTGINGDVGYITGTGDAQTINFNSSHLTGNSYADGGGATLNFNAANNITINQASFNDNHAGTQKSYMNFKGSN
IKVSGSSFTDDTDGGFSFSGNSNNSTISFNQTSFNQGTYHFSNSATLSFNHSAFNQGTYNFNSTQSAFNNSAFNQ
TYHFNAGNASFDNDTFNQGTYSFNTSKVSFSGINTLNSSSPFASLKGVSFSGSDAIFNLNQLTNNQTYDILTNGAI
QYGVYQSYLWDLINYGDKAISHVEVGNTYDVTDFINGQDETLQETFNKQSIITQFLGDDLQQAQKTYQODLSN
SQSALNNAASDNKIANSDTYTKNKNATIKKDAQQLKNTNQIAQDEQALQGDLDKQLANSPTGFSEQAFNQAO
KQEQDDEQTLQNEEKTFSNEQEGELKQAIQQAQOQKQKQEQQQAQOQTYQEDLTHSQSALNDVASTNTIASNDT
NYTNQNTAIKEDAQGLENTNQQAQOQDLDKQLANSPTGFSEQAFNQAOQKQEQDDEQTLQNEEKTFS
EQERLQAIANAKPTSPTPSHAPTPTKHTAPNTPPNKVPTPTPTQNPAPESVWSGVYWLQNKTYSNKGIYYIDPNL
SGQSGQSGNTLSTYTANLFGRSFVSNIQNGTLIIGNNTESVNSNGLIWIHGGFGYITGTFSAAANIYLTNNFKTGE

GVSNSDGGGANITFKASDNITMDGLNYNDAETVTKMIQTGASQHSYATFDALNNISVTNSSFSFDMTWGKFSFSAKN
ISFSNASFSFGFTNPGGSSVISANATNSLSFINSRLNGGAVYNLQANSIIFNNTQAVFNVLYSRGTSNFNATQTQLLG
NTNFTLSSQSLLNFNGDITTLQNNANITLGNKSQAFAFKNSLTLDNNSNLSLDNQSVLNANNTSAFNNQASLNTYNGS
QATFNSLDFNNGGTLNASSKLNASNASFSNNTTINLDDSVLSASNTSSLNANINFGASQADFGGNTIIDTASFN
FDSASSLNFNNLTANGALNFNGYTPSLTKALMSVSGQFVLGNNGDINLSDINIFDNITKSVTYNINLNAQKGITGIS
GANGYEKILFYGMKIQNATYSDNNNIQTWSFINPLNSSQIIQBSIKNGDLTIEVLNPNASANTIFNIAPELYNYQ
ASKQNPFGYSYDSDNQAGTYLTSNIGKGLFTPKGSQTPQAPGTYSFPNQPLSSLNINYNKGFSSSNLKTLLGILSQ
NSATLKEMIESNQLDNITNINEVLQQLDKIKITQVQKQALLETINHLTDNINQTFNNGNLIIGATQDNVNTSTSSI
WFGNGYSSPCTLDSATCSSFRNTYLGQLLGSTSPYLGYNADFKAKSIYITGTIGSGNAFESGGGADVTFSANN
LVLNKANIBAQATDNI FNLLGQKGIEKIFNQGNLANVLSQVAMEKIKQAGGLGNFIENALSPLSKELPASLQNETL
GQLIGQNNLDDLLNNSGVMNAIQNIISKLSIFGNFVTPSIIENYLAKQSLKSMDDKGLLNFIGGYMNASELSSI
LSVVLKDIITNPPTSLQKDIGVVANDLLNEFLGQDVIKKLESQGLVSNIIINNIISQGGLSGVYNQGLGSLVLPSSLQ
ALKENDLGTLLSPRGLHDFWQKGYFNFLSNGYVFNSSFSNATGGSLNLFVANKSIIFNQDNTIDFSKYQGALIFA
SNDVSNINITTINATNGLSLNAGLNNVSQKGEICVNLANCPTTKNSSSTNSSVTPTNESLSVRANNFTFLGAIAS
NGAIDLSQVKNNNSVIDTLNINENALQANNLTITNAFNNASNSTANINGNFTLNQQAATLSTNASGLNVMGNFNSYG
DLVFNLSHVSVAHINAQGSATIMANNNNPLIQFNTSSKEVGTYYTLIDSAKAIYGYNNQITGGSSLDNYLKYTL
IDINGKHMVMTDNGLYNGQAVSVKDGGLVVGFKDSQNGYIYTSILYNKVIAVSNDFINNLAQPTLKQYIAQIQG
TQGVDSIDQAGGSQAINWLNKIFETKGSPLFAPYYLESHSTKDLTTIAGDIANTLEVIANPNFKNDATNLIQINTY
TQQMSRLAKLSDTSTFASADFERLEALKNRKFADAI PNAMDVILKYSQRNRVKNVWATGVGGASFINGGTGTLTY
QINVGYDRFIKGVITVGGYAAGYSGFHANTQSGSSNVMMGVYSRAFIKRSELTMSLNETWGNKTFINSYDPLLS
IINQSYKYDTWTDDAKINYGDFMFKDKSVIFKPKQIGLAYYYYIGLSGLRGIMDDPIYNQFRANADPNKKSVLTFIN
ALESRHYFNKNSYFYIADVGRDLFINSMGDKMVRFIGNNTLSYRDGGRYNTFASITGGEIRLFKTFYVNAIGIGA
RFLDYKDINITGNIGMRYAF

Seq ID 263

MNTYKNSLNFHLNLVDCEKIPNVGKKSFAKMAHYHLGLENPYLALKITHALENALENLKTCSNALSSESEVCEIC
SDESQRNSQLCMVLHPRDVFIEDLKDFLGRYYVLNSIEEVDFALEKRLIEENIKEIIFAPPTLANDSLMLYIE
DKLQHFHLTFTTKIAQGVPTGVNFENIDSVLSRAFNRIKA

Seq ID 264

LFKRMVLIALLGVFSSVLSAKSLRRDDGILVSDLGKMKSELSDAPAWVFEDAKAPYEEMGVAYIPVNNKYLIGIEQ
ATLNAKLSLIVVFHEIMMKYKRFMEQFHESEQTNTNISYAIYNYLATKIQVSNYTNLKEVAVVKIKLVGCQIE
QIKRYLKASVENLNDNEIAYIAKVAQKEFGSVCALR

Seq ID 265

LKHLTPLTHTIFKALWLTALSASLSLAATESPTKTEPKPAKGVKNPKPSVTKVMMTNCNIDKDFNAKQKEVLKA
AYQFGSKENLGEMAGIWKESCAGVYKINFSDPSAGVYHSYIPSVLKSYPGHNDSPFLRNVMGELLIKDDAFASEV
ALKEILLYWKTRYHDNLKDMIKSYNKGSRWERSEKSNADAKEYEIEIQDRIRRLKESKIFDSQSSNDQELQKSANSN
LDLDPIGNAMPQALIAKETKIEETOAEKSQEMKETTSEQTKSKPEKAKDKPMYLAQINSTDFTPVKKSPPKPAKVS
QKHSFKNNIKNNVKNNAKTASKKQEMCKNCSPGQRNAILANHTLMQEL

Seq ID 266

MIEWMQNHRKYLVTIWIWISTIAFIAAGMIGWGQYSFSLDSDSAKVGQIKISQEELAQEFYRRLKDAYAESIPDFKE
LTKDQIKAMHLEKSLDNLQALLRNALDLGLGATKQEVAKIEKRTSVFQKDGVFDEELYKNILKQSHYRPHKF
ESVERLLILQKISTLFPKTTTLEQSSLSLWAKLQDKDLILILNPSDVKISLNEEEMKKYYESHKDKFKKPTSFK
TRSLYFDASLEKPDLEKEEYHKNKVSYLDKEGKLQDFKSVQEQVKHDLMSQKANEKALRSYIALKKANAQNYTT
QDFEENNSPYTAETITQKLTALKPLEILKPEPFKDGFIIVQLISQIKDELQNFNEAKSALKTRLTQEKTLMALQTLA
KEKLKDFKGSVGYVSPNFGGTISELNQEEASAKFINALFNRQEKKGFIANNKVVLVYQITEQNFNHSFSAESQYM
QRLVNNTKTDFDKALIEELKKRYKIVKVIQ

Seq ID 267

VSPLKTIRIYSYHDSIKDSIKAVVNISTEKIKNNFIGGGVFNDFPFQQFFGDLGGMIPKERMERALGSGVLIISKD
GYIVTMNHVIDGADKIKVTIPGSNKEYSATLVGTDESDELAVIRITKDNLPITKFSDSNDISVGLDVFAGNPFV
GESVTQGIVSALNKSIGINSYENFIQTDASINPGNSGGLIDSRGGLVGINTAIISKTGGNHGIGFAIPSNMVKD
TYTQLIKTKIERGYLVGLQDLQNSYDNKEGAVVISVEKDSPAKKAGILVWDLITEVNGKKVKNTNELRNL
IGSMLPNQVRVTLKVIRDKKERAFTTLAERKNPNKKETISAQNGAQQLNGLQVEDLTQETKRSMLSDDVQGVLV
SQVNENSAPAEQAGFRQNIITKIEEVEVKSADFHNHALEKYKGPKRFLVLDLNLQGYRIILVK

Seq ID 268

MSKSLYQTLNVSENASQDEIKKSYRRLARQYHPDLNKTKEAEEKFKBINAAEILSDEEKRRQYDQFGDNMFGGQ
FSDFARSRGPSDELDDILSSIFGKGGFSQRFSQNSQGFSGFNFSNFAPENLDITAAALNVSVLDTLLGNKKQVSINN
ETFSLKIPIGVEEGEKIRVRNKGKTGRTRGDLLLEIHIEEDEMYRREKDDITQIFDLPLKTALFGGKIEIATWHK
TLTLTIPNTKAMQKFRIKEKGIKNRKTSHVGDLYLQARLILPKTETLSNELKALLEKEL

Seq ID 269

MKQTTINHSVELVGIGLHKGVPVKLVLEPLGENQGIVFYRSDLGVNLPLKPNIVDTKMATVLGKDNARISTIEHL
LSAVHAYGIDNLKISVDNEIPIMDGSALTYCMLLDEAGIKELDAPKKVMEIKQAVEIRESDFVKIEPDSQLSLN

FTIDFNHPVIAKQAHFVFSKTAYKEQVAKARTFGFLQEVNLYRSIGLAKGGSNNNCIVLDENSILNKEGLRCEKE
FVCHKILDAMGDLMLGMPVMGKYTSFSGSHKLNSMLVKAILADAKNYEVLIAADPAKEFALQKAF

Seq ID 270

VQPMKSKKLYLALIIGVLLAFLTLSSWLGNSGLVGRFGVWFALNKKYFGHLSFINLPYLAWVFLLYKTKNPFTF
IVLEKTLGHLLGILSLLFLQSSLLNQGEIGNSARLFLRPFIFGDFGLYALITLMVVISYLILFKLPPKSVFYPPYMNK
TQNLKKEIYKQCLQAFSPNFSPKKEGFENTPSDIOKKETKNDKEKENRKENPINENHKTPNNEEPFLAIPTPYNTTL
NDSEPQEGVLQVSISSHPPTHYTIYPKRNRFDLNTNPTNPPLKEIKQETKEREPTPKETLTPTTPKPIPMPTLAPIIE
NDNKTENQKTPNHPKKEENPQENTQEEMIEGRIEEMIKENLKKKEKEVQNAFNPSVPTPTSACKPVMVKELSENKE
ILDGLDYGEVQPKDYELPTTQLLNAVCLKDTSLDENEIDQKIQDLLSKLRTFKIDGDIIRTYSGPIVTTFFFRPA
PNVKVSRILGLSDDLAMTLCAESIRIQAPIKGKDVVGIEIPNSQSQIYLRILESELFFQKSSSPLTLALGKDIVG
NPFITDLKKLPHLLIAGTTGSGKSVGNAMILSLLYKNPPDQKLVMIDPKMVEFSIYADIPHLLTPIITDPKKA
GALQSVAKEMERRYSLMSEYKVKTIIDSYNEQAPSNGVEAFPYLIVVIDELADLMMTGKBAEFPIARIAQMGRASG
LHLIVATQRPSPVDVVTGLIKTNLPSRVSVFRVGTKIDSKVILDTDGAQSLGRGDMLETPPGANGLVRLHAPFATED
EIKKIVDFIKAQKEVQYDKDFLLEESRMLDTPNYQGGDILERAKEVILEKKITSTSFQRLQKIGYNQAATITDE
LEAQGFSLPRNAKGNREILQNF

Seq ID 271

MLENVKKSFFRVLCGALCLGGLMAEQDPKELVGLGAKSYKEKFTQAKKYFEKACDLKENS GCNGLVLYYQGGG
VEKNLKKAAAFYAKACDLNYSNGCHLLGNLYSSGQGVSONTNKALQYYSKACDLKYAEGCASLGGIYHDGKVVTDR
FKKAVEYFTKACDLNDGDGCTILGSLYDAGRGTPKDLKKALASYDKACDLKDSPCFCFNAGNMYHHGEGATKNFKEA
LARYSKACELENGGCGFNLGAMQYNGEGVTRNEKQAIENFKKGCKLGAKGACDILKQLKIKV

Seq ID 272

VKLPAKALNEATAGAALKYHIKRALERSHSISDFSKNLELSTQKSHFSNNTLKIIEELNNGVKQASBEIKEKARDFS
NQKLTNEQIKDLLNNAEIPITSGRDAITFGVNNLNPEIVEFLHKNKKMIIEKASNKELELLKDANFKHPENIRASL
DHDAIAHILKRHGVSNNVRNGEIPITNEDIANRYIVNNADAILRTLDNENKELISAFKQINGYAVVVEQAINKK
NELVLKTMYSKSGDYKDNNAKKSSTHTLNADAKVNHRLSSYSGATENTTQKDLIDQENLLKTSNENLNSTPKPT
NLSPLEQANAELAKLESEKLESEKEFLKAKEQEAATRKAAKKKLEHERGNAGNIESQTKIEVGEDIPTQTQAQLP
KSRVRLNEREYIDLDYAIKAKDLKPSFTTGGTQKRTDMNEEQIKSIAENFDPKKIFGSGGFEDLPILHGDQVIA
GNHRIQGMNFTPKSRFSYERAIKEYYHIDLKPDDELLVRVPHKRLNNTTEINNLAASSNQGRFNSSEDHAIKAVLSHY
EAKLKELDQKLDADSISLKNIVAKNLFNFKATHPNVTDNLALLMFNMPRTKTQGIELLNRWKKEFSNDIKSYEK
VKKMFVDNAGSFHNLHDLNFPKVS LNAYLSDIMDRSFANLKNYQSTSES LKDLSEKFYKTSSELMFEKSDQSTSD
ISEILGGAIAARFARFDDPSKALFEALRS DNKKGLKDYKIADVTKDMFNADSKFKDIDIDYDFTHYLLMVNREPNE
NNPILKRLIEAVKDMQKSEKGIKQKLETPSEWGHNYSEFKGDGLGAINKLLLETKKFVAGAFHKEGLGIDILVYG
NSKYGLEHIENRRESDAIDKMSKEEAKYALKIINNIPNIISNGKLSKDNLGRLSIEFENQVRVGLNDSWKGETLN
NRWVITSYEIDKSRNGLIESPLAPNYKGKDTNPLNLDSPNPTTKN

Seq ID 273

MGYASKLALKICLASLCLFSALGAHLEQKRNYYKGEAYNNKEYERAASFYKSAIKNGEPLAYVLLGIMYENGR
GVPKDEKKAAYFQKAVDNDIPRGYNNLGVMYKEBGRGVPKDEKKAVEYFRILATEKGYTNAYINLGIMYMEGRGVPS
NYVKATECFRKAMHKGNEAYILLGDIYYSNDQLGIEPDKDKAIVYYKMAADMSSSRAYEGLAESYQYGLGVEKD
KKKAEYMQKACDFDIDKNCKKKNTSSR

Seq ID 274

MGGILSSLNTSYTGLQAHQSMVDVTGNNISNASDEFYSRQRVIAKPQAAAYMYGTKNVNMGVDVEAIERVHDEFVFA
RYTKANYENTYYDTEFSLHKEASAYFPDIDEASLFTDLQDYFNSWKELSKNAKDSAQKQALAKTEALTHNIKDTR
ERLTTLQHKASEELKSVIKEVNSLGSQIAEINKRIKEVENNKS LKHANELRDKRDELEFHLRELLGGNVFKSSIKT
HSLTDKDSADFDESYNLNIGHGFNIIDGSIHPLVVKESENKGLNQVYFQSDDFKVTNITDKLNQGRVGALLNVY
NDGSGNTLKGKLQDYIDLDSFAKGLIESTNAIYAQSASHYIEGEPVEFNSDEAFKDTNYNIKNGSFDLIAYNTDG
KEIARKTIAITPITTMNDIIQAINANTDDNQDNTENDFDDYFTAGFNNETKKFVIQPKNASQGLFVSMKNDGNTNF
MGALKLNPFFQGDASNISLNKEYKKEPTTIRPWLAPINGNFDVANMMQQLQYDSVDYNDKFDIKPMKISEFYQF
LTGKINTDAEKSGRILDTKKSMLLETIKKEQLSISQVSVDEEMVNLIKFQSGYAANAKVITAIDRMIDTLLGIIQ

Seq ID 275

MRYLWFLIHTIGLFATDKTLDIIKTIQKLPIEVRYSIDNDANYALKLHEVLANDLKTSQHFDVDSQNKDQGAINY
AELKDKKVHLVALVSVAVENGKNISRLKLYDVTGTLLKKTFDYPIVSLDLYPFAAHNMAIVVNDYLYKAPSIAWMKR
LIVFSKYIGPGITNIALADYTMRYQKEIIKNNRLNIFPKWANAEQTEFYTYTQYGERTPMILKYNIQKATHENIASS
QGMVAVSSVSSDGSKILMSLAPDGPVLYDTHKKTTKITRYPGIDVSGVFLEDDKSMAFVSDRSYGYPNIYMKK
LGLKESAEQLLYEGRSNESIDAYKDSIVYVSRENLEFGKTVFNLNLTLSKYIRRLTVNGSNQMPRFSTDRNT
MYIKKTPQEYAMGLIILDYNQSFLEFPLKNVKIQAFDW

Seq ID 276

MFQALSDGFKNALNKIRFQDDEKALDRALDELKKTLLKNDVHHKVARELLKKVESQTKLNGIGKQQFLDALEKSLI
EILSAGSSGFTFAQTPPTVVLMAQLQSGKTTTAKLAHYLTKNKKVLLCACDLQRLAAVEQLKVLGEQVGVVEV
FYEENKSVKEIASNALKRAKEAQFDVLLVDSAGRLAIDKELMQELKEVKEILNPHEVLYVADALSGQDGVKSANTF
NEEIGVSGVVLKFDSDSKGGIALGITYQLGLPLRFIGSGEKIPDLDFVPERIVGRLMGAGDIVSLAEKTASVLN

PNEAKDLSKKLKKQFTFNDFLNQIEKVKKLGSMSSLSMIPGLGNMASALKDTDLESSLEVKKIKAMVNSMTKKE
QENPEILNGSRRKRIALGSGLEVSEINRIIKRFDAQSKMAKRLTNKKGISDLNMLMSQAKNQTPPKMR

Seq ID 277

MIMKQEPPTYQPREIEKKIYBICSHRGYFRIDGNEAIQEKKNRFLMMPPPNVTGVLHIGHALTLSDILARYKR
MDGYKTLYQPGLDHAGIATQNVVEKQLLSQGIKKEDLGREEFIKKVWEWKEKSGGAILLEQMKRLGVSAAFSRTRFT
MDKGLQRAVKLAFLKWYEKGLIIQDNMNVNCTKDGALSDIEVEYEEERKALYIIRYYLENQDYLVVATTRPETL
FGDSALMVNPNDERYKHLVGQKAILPLIHRITPIIADDEHVMEFPGTGCVKVTPGHDFNDYEVGKRHHLETFIKIFDE
KGILNAHCGEFENLERLEARDKVVERLKENALLEKIEBHTHQVGHCHYRCHNVVEPYVSKQWVFKPETIAQSSIEKIQ
QGLARFYPSNWINNINAWMRRLRPWCISRQLFWGHQIPVFTCENNHOQFVSLDTPLSCTCKSETLEQQDKVDLTWF
SSGLWAFSTLWGQEQESGLFNESDLKDFYPNTTLITGFDILFFWVARMLFCSESLLGELPFKDILYHALVRDEKGE
KMSKSKGNVIDPLEMIEKYGADSLRFTLANLCATGRDIXLSTTHLENNKNFANKLFNAASYLKLKQESFKDKERLN
EYQTPPLGRYAKSRLNSATKEARNALDNYRFNDATLLYRFLWGEFCDWFIIEFSKVENEAIDELGSVLKEALKLHP
FMPFISESLYHKLSENTELENTESIMVMPYPKDLAQDEKLEHBEFEVIKDCIVSLRRLKIMLETPIIVLKEASVGLRE
AIENTERLQTYAQKLARLEKVSIVSSKPLKSVSDVGEFCQTYANLENLDLSPLVARLKKQLEKLEKEKELKLNHNE
NFVKNAKPSVLEKAKESLKTLLKESKIKQELDLLEQP

Seq ID 278

MKKTFLIALALTASLVGAENTKWDYKNKENGPHRWDLKHKDFEVCKSGKSQSPINIEHYHTQDKADLQFKYAASK
PKAVFFTHHTLKASFEPNHNINRGHDYVLDNVHFHAPMEFLINNKTRPLSAHFVHKDAKGRLLVLAIGFEEGKEN
PNLDPILEGIQKKQNFKEVALDAFLPKSINYHLTALSPLLLAQRGWHGL

Seq ID 279

MSKKIPLKNRLRADFTKTPDLEVPNLLLLQORDSYDSFLYSKEGKESGIEKVFKSIFPIQDEHNRTILEYAGCEFG
KSKYTVREAMERGITYSIPLKIKVRLILWEKDTKSGEKNKIDIKEQSIIFIREIPLMTERTSFIINGVERVVVNQL
HRSPGVIFKEEESSTSLNKLITYTGQIIPDRGSWLYFEYDSKDVLYARINKRRKVPTILFRAMDYQKQDIKMFYP
LVKVRYENDKYLIPIFASLDANQRMEDLKDPOQKVILLAGKLTSRKIKELKENHLEWVEYPMIDILLNRHLAEPVM
VGKEVLLDMLTQLDKNKLEKIHDLGVQEFVIINDLALGHDAIIQSFSADSESLKLLKQTEKIDDENALAAIRHK
VMKPGDPVTTEVAKQFVKLFFDPERYDLTMVGRMKMNHKLGLHVPDYITTLTHEDIITTVKYLMIKKNQKIDD
RDHLGNRRIRAVGELLANELHSGLVKMOKTIDKLTTMSGAFDSLMPHDLVNSKMITSTIMEFFMGGLSQFMDQT
NPLSEVTHKRRLSALGEGGLVKDRVGFEARDVHPHYGRICPIETPEGQONIGLINTLSTFTRVNDLGFTEAPYKKV
VDGKVVGETIYLTAIQEDSHIIAPASTPIDEENILGDLIETRVEGEIVLNEKSKVTLMDLSSSMLVGVAASLIPIF
LEHDDANRALMGTMQRQAVPLLRSDAPIVGTGIEKIARDSWGAIKANRAGVVEKIDSKNIYILGESKEEAYIDA
YSLQKNLRTNQNTSFNQVPIVKVGDKVAGAGIADGPSMDRGELALGKNVRVAFMPWNGYNFEDAIVVSECITKDD
IYFTSHIYEKEVDARELKHGVEEFTADIPDVKEEALHLDSEGTIVKVGTYVSAGMILVGTSPKGEIKSTPEERLL
RAIFGDKAGHVNKSLYCPPSLEGTVIDVKVFTKKGYEKDARVLSAYEEEEKAKLDMEHFDRLTMLNREELLRVSSL
LSQAILEEPFHSNGKDYKEGDQIPKEELASINRFTLASLVKKYSKEVQNHYEITKNNFLEQKKVLGEEHEEKLSIL
EKDDILPNGVIKKVKLYIATKRKLKVGDKMAGRHNKGIVSNIVPVADMPYTADGEPVDIVLNPLGVPGRMNIGQI
LEMHLGLVGKEFGKQIARMLDCKTKDFAKELRAKMLEIANAINEKDPLTTHALENCSDDEELLEYAKDWSKGVKMAI
PVFEGISQEFKYLFEAKIAMDGKMDLYDGRTEKMRERNVVGMYMIKLHLVDEKVHARSTGYPYSLVTHQPVG
GKALFGGQRFGEVWALEAYGAHTLKEMLTIKSDDIRGRENAYRAIAKGEQVGESEIPETFYVLTKEQLSLALD
INIFGDDVDEDGAPKPIVKEDDRPKDFSSQTLASPEKIHWSYGEVKKPETINYRTLKPERDGLFCMKIFGPT
KDYECCLGKYKPRPKDIGTCEKCGVAITHSKVRRFRMGHIELATPVAHIWYVNSLPSRIGTLLGVKMDLERVLY
YEAYIVKEPGEAAYDNEGTKLVKDYDILNEEQYQNISRRYEDRGFVAQMGGEAIKDLLEEIDLITLLQSLKEEVKD
TNSDAKKKLIKRLKVVESFNLNSGNRPWMLTVLPVLPDPLRPLVALDGGKFAVSDVNELYRRVINRQLKRLM
ELGAPETIIVRNEKRMLEAVDVLFDNGRSTNAVKGANKRPLKSLSEIIGKQGRFRQNLGKRVDFSGRSVIVVGP
NLKMDCEGLPKNMALELFKPHLLSKLEERGYATTLKQAKRMIEQKSNEVWECLQEITEGYPVLLNRAPTLHKQSIQ
AFHPKLIIDGKAIQLHPLVCSAFNADFQDMVAVHVPVLSQEAIAECKVLMMLSSMNTLLPASGKAVAIPSQDMVLGLY
YLSLEKSGVKGEHKLFSVNEIITAIDTKELDIHAKIRVLDQGNIIATSAGRMIIKSILPDFIPTDLWNRPMKKKD
IGVLVDYVHKVGGIGITATFLDNLKTLGFRYATKAGISISMEDIITPKDKQKMVEKAKVEVKKIQQQYDQGLLTDQ
ERYNKIIDTWTEVNDKMSKEMMTAIAQDKEGFNSIYMMADSGARSAQIRQLSAMRGLMTKPDGSIITETPIISNF
KEGLNVLEYFNSHTGARKGLADTALKTANAGYLTRKLIDVSQNVKVVSDDCGTHEGIEITDIAGVSELIEPLEERI
FGRVLLLEDVIDPITNEILLYADTLIDEAGAKVVEAGIKSITIRTPVTCKAPKGVCAKCYGLNLGEGKMSYPGEAV
GVVAAQSIGEPGTQLTRTFHVGGTASRSQDEREIVASKEGFVRFYNLRTYTNKEGKNIIANRRNASILVVEPKIK
APFDGELRIETVYEEVVSVKNGDQEAQFVLRSDIVKPSLAGVGGKIEGKVLPYASGHKVKHGGSIADIIQEG
WNVNPNRIPYASELLVKDNDPIAQDVYAKEKGVIKYVLEANHLERTHGIIKKGDMVSEKGLFAVIADDDNGREARHY
IARGSEILIDDNSEVSTNSVISKPTTNTFKTIATWDPYNTPIIADFVKGVGFVDVIAGVTVAEKEDENTGITSLVV
NDYIPSGYKPSLFLGANGEMRYFLEPKTSIAISDGSSVQAEVLAKIPKATVKSREDITGGLPRVSELFPEARKPK
KEDVAILSEVDGIVSFGKPIRNKEHIIVTSKDGSRMDYFVDKQKQILVHADEFVHAGEAMTDGVISSHDILRISGE
KELYKIVSEVQVYRRQGVSIADKHIEIIVSQMLRQVRLDLSGDSKFIEGDLVSKKLFEKENARVSHALKGEPALIA
EPVLLGITRAAIGSDSIISAASFQETTKVLTEASIAMKKDFLEDLKENVVLGRMIPVGTGMVKNKKIVLRALEDNS
KF

Seq ID 280

MAKEKFNRTKPHVNIGTIGHVDHGKTTLSAAISAVLSLKGLAEMKDYDNIDNAPEEKERGITIATSHIEYETENRH
YAHVDCPGHADYVKNMITGAAQMDGAILVVSADGMPQTRHILLSRQGVPHIVVFLNKQDMVDDQELLELVEM
EVRELLSAYEFPDGTPIVAGSALRALEBAKAGNVGEWGEKVLKMAEVDAYIPTPERDTEKTFMLPVEDVFSIAG
RGTVVTGRIERGTVKGVDEVEIVGIRPTQKTTVTGVEMFRKELEKEAGDNVGVLLRGTKKEEVERGMVLCKPGSI

TPHKKFEGEIYVLSKEEGGRHTPFFTNYRPQFYVRTTDDVTGSITLPEGVEMVMPGDNVKITVELISPVALELGTKF
AIREGGRTVGAGVVSNIIE

Seq ID 281

VLIVQKYGGTSMGSIERIHNAQVRLESVTLGHQVVVVVSAMSGETDRILLEFGKNFSHPNPKREMDRIVSVGELVS
SAALSMALERYGHRASISLKEAGILTSSHQNAVISOIDTKRITELLEKNYIVVIAGFQGADIQGETTTLGRGGS
DLAVALAGALKAHLCBIYTDVDGVYTTDPRIEKAQKIAQISYDEMLELASMGAKVLLNRSVELAKKLSVKLVTR
NSFNHSEGTLLIVAEDFKGERMETPIVSGIALDKNQARVSMEGVEDRPGIAAEIFGALAEYRINVDMIVQITIGRDG
KTDLDFTIVKTIETTKQALKPFLAQMDSIDYDENIAKVSIVGVGMKSHSGVASIAPKALAKDNINIMMISTSEIK
ISVLIDIKYAELAVRTLHVVYQLDQ

Seq ID 282

MKKHILSLALGSLVSTLSAEDDGFYTSVGQIGEAQMVTNTKGIQQLSDNYENLNNLLTRYSTLNTLIKLSADP
SAINAVRENLGASAKNLIGDKANSAPYQAVLLAINAAVGFVNNGVYVTCGGNANGQESTSSTTIFNNEPGYRSTS
ITCSLNGHKPGYYGPMSEIENFKKLNEAYQILQTALKNGLPALKENNGKVSVTYTYTCSGQGNNNCSPSVNGTKTTT
QTIDGKSVTTTTISSKVGSIASGNTSHVITNKLDGVPDQAQALLAQASTLINTINEACPYFHATNSSEANAPKFST
TTGKICGAFSEEISAIQKMITDAQELVNQTSVINSNEQSTPVGNNGKPFNPFDTASFAQGMLANASAQAKMLNLA
HQVQGAINPENLSENFKNFVTGFLATCNNKSTAGTGGTQGSAPGTVTQTTFASGCAYVEQTLTNLGNLSIAHFGTQE
QQIQQAENIADTLVNFKSRYSELGNTYNSITTALSKVPNAQSLQNVVSKNNPYSPOGIETNYLQNSYNQIQTI
NQELGRNPFKRVGIVNSQTNNGAMNGIGIQVGYKQFFGQKRKGARYYGFFDYNHAFIKSSFFNSASDVWYTGFGA
DALYNFINDKATNFIKGNKLSLGLFGGIALAGTSLWLNSEYVNLATVNNVYNKMNVANFQFLFNMGVRMNLARSK
KKGSDHAAQHGIELGLKIPTINTNYYSFMGAELKYRRLYSVYLVNFVAY

Seq ID 283

LDSFHSFNQHAFNHRHAKTYHLFAHIQQQIAICLVQFLKQKHYAKVLDLGGSGGAVFNALERQNILIEEFIALDNSI
NMLKLHPHTSINIQKISLEHADFEHVFCTYDLVVSSSSLOWARDLKSULEKIALSSKEVALAIHTDFSLHEVHBF
LGTPSPPLRDLKTLKSLIKNAFKHFQIELENKRFALYFNKQDCLNYLKKCGLLGGSTLSFKQKHHFQONMAFEKLS
YEVLLFSGIKRS

Seq ID 284

LSGFNPLNSPLVASSLSLKEAYYLEKLSLKKGFKIHYKMTKDSLNLLEKSDLCVLFGGFSNACLNERWILES
SHSKRPYALLRPLQDTRDLQENCLFASYEIHTEAAILALILRGILEQTSQKGVLEKIDVGYLSSEANMSEBELQ
ELIALIVKAKKRALVLRREITKHANNAFLYTLSELQNYLEILHIPCYDSSATTAFYDFKQEWLLETAFAKEGILP
FKSQLQSKDLELLERISEANGSFVYVSYSLETPKLSFSKQFKIANKIEHSAKAGFQISNQTLECELEENPHLKLGLI
AILEGAFFDAYPIPIILSHSQGIS

Seq ID 285

MISLIEKAPYIPYPLALYEKLEQPHTLTFESAEIESKAHTKSLLMAKACLKLCNHNIVTITSLTPNGGAFLQKLS
AFFKTPIQDNALILTYTKNKTQDEFLKLFEPSPFDALRGLFKSVKTKPKHPFTLLSAGVFSFEMLNFFEDLPHLK
AKDNTVHDFIFYLAQNLIIIDHKEKSVEILGACFDERFKTEIAQELQDLKELAKSIKSDFPVKKSQKSREVSANCS
DSEFEKRVLSLQEEIKKGEIFQAVLSRSFYMECLEGLSAYYHLKLTNPSPYMFYIKDSDFILFGASPESALKYNAL
TNTAEIYPIAGTRLRGKDKQGNIDYDLDSKMEFDLQHDYKERAHEIMLVDLARNDMARVSCKKRYCDKLLKVDKYSN
VMHLVSRVVGELKKGCDLHAYRSFMNAGTSLGAPKISAIRLIYQLENQRRGSYGGSVGYLNSGSMDSCTITRSC
FVKNNRAVIQAGAGIVLDSVPQNEANETRAKAQALIDAIRKTSI

Seq ID 286

MIEKIIDL SVKNKLLTTLVTLLIFLASLWAIKSVRLDALPDLSPAQVVVVQITYPNQSPKIVQEQTYPVPLVSTFMSI
ANIDTVRGISSYESGLIYIIFKDGVNLYWARDRVLEQLNRVSNLPKDAKVEIGSDSTSIGWAYQYALSSDSKNLSD
LKVLDQDFYRYALLGVDGVSEVASVGGFVKDYEVTLQNDSLIRYNLSLEQVANAIKNSNNDTGGGVILENGFEKII
RSHGYIQSLKDLEEVVKKEGAIPKIKDIASVRLTPKPRGAANLNGDKKEVVGGLVMVRYHADTYKVLKAIKEKI
ATLQASNPDKITSYDRSELIEKGIDNLIHTLIEESVIVLVIATFLLHFRSALVVIITLPLSVCISFLLMRYFN
IEASIMSLGGIAIAIGAMVDAIIVMVENAHKHLQHDVKNQORVNGIIEGVKHVGGAIFFALMIIVVSFLPIFAL
TGQEEKLFAPLAYTKTFAMLVGALLSITMVPILMVWLKGRILEESKNPINAFFMKIYGVSLNVVLKFRYAFLIAS
VLGLGGLYVAYKLNWEFIPQINEGVVMYMPVTINGVSIDTALEYLKKNSAIKRLDFVKQVFGKVGRANTSTDA
GLSMIETIYIELKPQNEWKEKLSYKEVRDKLEKTQLKGLTNSWTYPIRGRTDMLLTGIRTPGLIKLYGNDTKLQ
LAILMEQQLKTLKESLSVFAERSNNGYITLDLNDENLARYGINKKAVLDAIKFALGGATLTTMIKGVENYPISLR
LEDTERNTIEKLNLYIKTAYNYMPLRELARIYDNPVAVLKSEKGLNVNFIYIVPQNGISSDAYRQLAQKALEKI
QLENGYFFEFSGESQYLEAFKTLQYIVPVSVFIIFILIVFALKNLNSLLCFFTLPAFLGGLIFMNLGMFNMSV
AALVGFLALLGVASETAIVMIITYLEDAFQKFIKTPLKEQNSTTLKEAIMHGAVLRVRPKLMTFFSILASLIPIMYS
HGTGSEIMKSIAAPMLGGMISVVTLFIITPAYFVIKNAGIKSNQT

Seq ID 287

MSVSHVALILRKLFIYHRQGVFMGGFSVGMLKDYVDIFVFAVLGVASFLALWFAIERVIFYSKVDLKAYDDIDALNL
DLTKNLITILYVIFSNAIPYVGLLGTVLGIMVIFYDMGVSGGMDARTIMVGLSLALKATAGLAVAIPTLIAYNSLLR
KSDVLSEKFRIMKK

Seq ID 288

MKISPSPRKLSKVSTSVSFLISFALYAIGFGYFLLREDAPEPLAQAGTTKVTMSLASINTNSNTKTNAESAKPKEE
PKEKPKKEEPKKEPKKEVTKPKPKPKPKPKPKPKPEPKPEPKPEPKPEKVEEVKKEEPKKEPKKEEAKERAK
EKSAPKQVTTKDIVKEKDKQESNKTSEGATSEAAQYNPGVSNFELMKIQTAISSKNRYPKMAQIRGIEGEVLVSF
TINADGSVTDIKVVKSNFTDILNHAALAIKSAHLFPKPEETVHLKIPIAYSLKED

Seq ID 289

MKKSLLLSLSLIASLSRAEDDGFYTSVGYQIGEAVQQVKNTGALQNLADRYDNLNNLLNQYNYLNSLVNLASTPSA
ITGAIDNLSSSAINLTSATTTSPAYQAVALLNAVGMWQVIALFIGCGPGPTNNQSYQSFGNTPALNGTTTTCNQ
AYGTGPNGLISIDYQKLNQAYQIIQTALNQNGGGMPALNDTTKTGVVNIQQTNYRTTTQNNIIIEHYTTENGKEI
PVSYSGSSFSPTIQLTYHNNAENLLQQAATIMQVLITQKPHVQTSNGGKAWGLSSTPGNVMDIFGSPFNAINEMI
KNAQTALAKTQQLNANENAQITQPNNFNPYTSKDKGFAQEMLNRAEAQAEILNLAKQVANNFHSIQGPIQGDLEEC
KAGSAGVITNNTWGSAGCAVFKETLNSLEQHTAYYGNQVNDRALAQITLNFKEALNTLNKDSKAINSGISNLPNAK
SLQNMTHATQNPNSPEGLLTYSLDSSKYNQLQTLAQELGKNPFRFVGVIDFQNNNGAMNGIGVQVGYKQFFGKKRN
WGLRYYGFFDYNHAYIKSNFFNSASDVWTVYGVGMDALYNFINDKNTNFLGKNNKLSVGLFGGFALAGTSWLNSSQV
NLTMNGIYNANVSTSNFQFLFDLGLRMNLARPKKSDHAAHQHGIELGFKIPTINTNYYSFMGAKLEYRRMYSLF
LNVVFAY

Seq ID 290

MLAKMSFMQNVKNIQEVESHKRVLRVDFNVPLDENLNTDDTRIRESLPTIQYCIDNKAKDIIIVSHLGRPKGV
EEKLSLKPFLKRLERLLNHEVFSQNIQVLKQALNENAPTRIFLLENIRFLRGEENENDENLAKDLASLCDVFNDA
FGTSHRKHASTYGTAKFAPIKVSGFLLKKEIDSFYQAFNHPLRPLLLIVGGAKVSSKLTLLKNILDLDIKLIAGA
MSNTFLKALGYDVQDSSVEDALINDALELLQSAKEKKVKYLPIDAVTTDDILNPKHIKISPVQDIEPKHKIADIG
PASLKLFESEVIESAPTILWNGPLGVHEKQEFARGTTFLAHKIADTYAFSLIGGGDTIDAINRAGEKDNMSFISTGG
GASLELLEGKILPCFEVLDKRH

Seq ID 291

VVLLTMTKRLFKGLLAVSLAVSLHGGEVKEKKPVKPKVEDPQELAAKRVEAFSRFSNVVSEIEKKYVDKISISEIM
TKAIEGLLSNLDASHAYLNEKKFKFQAQTEGEFEGGLGITVGMRDGVLTVIAPLEGTPAYKAGVSGDNILKINNE
STLSMSIDDAINLMRGKPKPTPIQITVVRKNEPKPLVFNIIRDIIKLPSVYVKKIKETPYLYVRVSGFDKNVTKSVL
EGLKANPKAKGIVLDRGNPGGLLNQAVGLSNLFIKEGVLVSQKGNKEENLEYKANGRAPYTNLPIAVLVNGGSA
SASEIVAGALQDHKRAVIIGKTFGKGSVQMLLPVNKDEAIKITARYYLPSGRTIQAKGITPDIVYIPGKVPENE
NKPSLKEADLKHHLBQELKKIDDKTPNSKEADKDKKNEEKEITPKMINDDIQLKTAIDSLKTWSIVDEKMDKAP
KKK

Seq ID 292

MNETLYCSFCKKPESRDPKKRRIIFASNLNKDVCVCEYCIDVMHGEHLHKYDNSLLALKRDRLRRMESSAYEEEFLL
SYIPAPKELKAVLDNYVIGQEQAQKVFSVAVYNHYKRLSFKEKLLKQDNQDSNVELEHLEEVLSKSNILLIGPTG
SGKTLMAQTLAKHLDPIDAISSDATSLTEAGYVGEDVENILTRLLQASDWNVQKAQKQIVFIDEIDKISRLSENRSI
TRDVSSEGVEVQALLKIVEGSLVNIIPKGGKHKPEGNFIQIDTSDILFICAGAFDGLAEIKKRTTQNVLGFTQEKM
SKKEQEAAILHLVQTHDLVYGLIPELIGRLPVLSTLDSISLEAMVDILQPKKNALIKQYQQLFKMDEVLDLIFEEEA
IKEIAQLALERKTGARGLRRAIIEFCLDIMFDLPKLKGSEVRITKDCVLKQAEPLIIAKTHSKILP

Seq ID 293

MRDFNNAQITRLKVRQNAVFEKLDLEFKDGLSAISGASGVGKSVLIASLLGAFGLKESNASNIEVELIAPFLDTEE
YGFIREDEHEPLVISVIKKEKTRYFLNQTSLSKNTLAKLLKGLIKRLSNDRFSQNELNDIIMLSLLDGYIQENKA
FSPILGALIEEKFTRLKLEKERRILEDKKRFQKDLERLNFEKMKLERLDLKEDEYERLLEQKLLSSKEKLNDRK
ALALEVLENTHKITHALESVGHSAEFLKSALLEASALLEKEQAKLEECERLDIEKVLRLGMLSGIICKDYGSIMHA
KERLGHVKNELHNLKEIDSHCETYHKEIERLKTECLKCEEISGFRKEYLAGFNALLSAKADLLKSPSLVLEDA
PMSEKGAQKLVLNLQNSQLETLSSGEYSRLRLAFMLLEMEFLKDFKGVVLVDEMDSNLSGEESLAVSKALETLSH
SQIFAISHQVHIPALAKNHILVFKENHKS LAKTLNNEERVLEIARMIGGSENIESAISFAKEKLKAQE

Seq ID 294

MPDELRAEKSFPSPKPYDSLKNKSEFDRVYQKGFKKHNPFFSLFVLDLSQEPPEKAGFKDPLFCRLKDKKTLYLIG
LSVSKKVGNAVKNRLIKRRLRSITLKHAALCQGLALVFVPRSDCYHLDFWALEKHFLMLTSLKNYMNKALKDLKK
GITHTYAKQ

Seq ID 295

MLKLASKTICLSLIGSFTAVEAFQKHQKDGFFIEAGFETGLLQGTQTKETIATTQEKPKPKPKPKPITPQSTYK
YYISQSTVLKNATELFAEDNITNLTFFYSLTPVYVYAYNQESAEEAGYGDSSSLIMIQNFLPYNLNNIELSYTDNQGN
VVSIGVITFPKQSGIILPASLFNDPQNLADGFFQQLQTATTFRSDASTQNLFDKLSKVTTNLQMTYINYNQFSSGN
GSGSKPPCPPYENQENCTAKVPPFTSQDAKNLTNLMNMMAVFDKSWEDAVKNAPFQFSDNNLSAPCYSNYSTCV
NPYNDGLVDPKLIKKNKGDEYNIENGQTGSVILTPQDVIYSYRVTNLYVNLPPRGDDLGLGSQYGGPNPGDDG
TNFGALGILSPFLDPEILFGKELNKVAIMQLRDIIEHYGHTLGYTHNGNMTYQVRVMCEENNGPEERCKGGKIEQV
DGQEVQVFDNGHEVRDIDGFSFYDVCSTRFGGQNPAPFPSSYPNSIYTDSCQVPAVLIGVTSVAVWQQLIDQNALPVDY
TNLSSQTNLYNASLNTQDFATMLSAISQSLSSTRSSATTYRTSKTSRPFAPLLGVNLKMGYQKYFNDYLGSSY
GIIKYNYAQANNEKIQQLSYGVGMDVLFDFITNYTNEKNPKNNLTKKVFTSSLGVFGGLRGLYNSYLLNQYKGS
NLNVTGGLNRYKHSKYSVSGISVPLVQLKSRVSSDGATTNSITLNEGGSHPKVFFNYGWIF

Seq ID 296

MKKIILACLMAFVGANLSAEPKWYSKAYNKTNTQKGYLYGSGSATSKEASKQKALADLVASISVVVNSQIHIQKSR
VDNKLKSSDSQTINLKTDDLELNNVEIVNQEVQKGIYYTRVRINQNLFLQGLRDKYNALYGQFSTLMPKVCKGVFL
QQSKSMGDLAKAMPIERILKAYSVPVGSLENYEKIYYQNAFKPKVQITFDNNGDABIKSALISAYARVLTTPSDEB
KLYQIKNEVFTDSANGITRIRVVVSASDCQGTPVLNRSLEVDEKKNFAITRLQSLLYKELKDYANKEGQGNTGL

Seq ID 297

MKENKAFTHLHLHTEYSLLDGANKIKILAKRVKELGMKSVSVTDHGNMFGAIDFYTSMKKEGKIPIGMEAYIHND
DNLSSKETKQRFHLCLFAKNQEGYENLMFLSSMAYLEGFYFFPRINKKLLKEHSGKIIASSACLQGEVNYHLNTNN
ERNRKYGAKGYDEAKKIACEYQEIFEDDFYLEIMRHGILDQRFIDEQVIKMSLETGLKIIATNDTHYTMPNDAKAQ
EVAMCVAMGKTLNDKGRCLKHSVHBFYIKSPREMAKLFADIPALENTQELADKCVLEIDLKDDKKNPPTPPSFKFT
KAYAQNEGLNFEDDASYFAYKAREGLKERLVLVPKEKHQYKERLEKEIEVITNMKFPGYMLIVWDFIRYAKEMGI
VPGPGRGSAAGSLVAFALKITDIDPLKYDLLFERFLNPERISMPDIDTDFCQRRRKEIEYMIKEYGKYNVAQVIT
FNKMLAKGVIRDVAVRLDMPYKEADDFAKLIPNRLGITLKGYEKNGEFIEGAWELEPKIKELVESNELAKQVWEYS
LNLNENLRNAGVHAAALVVDSSQELWHKTPLFASEKTGGIVTQYSMKYLEPVDLIKFDLGLKTLTVIDDALKI IK
TQHKISVDFLSLDMDDPKVYKTIQSGDTVGIFQIESGMFQGLNKRRLRPSSFEDIIAIIALGRPGPMESGMVDDFVN
RKHGVEPIAYAFKELEPILKPTYGTIVYQEQVMQIVQTIGGFSLGEADLIRRAMGKKDAQIMADNKAQFVEGAKNL
GHDGQKAANLWDLIVKFAGYGFNKSASHSAAYAMITFQATYLTYYKHEFMAAMLTSESINKIESVARYIDEVRALEIE
VMPPHINSSMQDFSVAEFKNQKGELEKKIVFGLGAIKGVGGEPIKNIIEERAKGDYKSLDFISRVDFSKLTKKSL
EPLVKSGSLDNLGYTRKTMLANLDLICDAGRAKDKANEMMQGNSLFGAMEGGTKEQVVLDMIDLGEHDAKTLLLEC
EYETLGIHVSGNPLDEFKEEIKGFKNLVKSIDIEEIEIGSQAYLLGKIMEVKKKIGKRSGKPYGIADILDYRGKFE
LMLFEKQNLNALEELDINKPLVFKCKIEEQEEVRLRLFEILDLESAREVKIPKARYKDPKQKEEVREIPPMEMLA
SSSCSLAIVLENDVKKEFLRQIKESALKHQGKRPLYLI IKDKDKQFKIQSDLMVNEKIKDDFKGLEWRDLA

Seq ID 298

MTLLVGLGNPTLRYAHTRHNAFGDILDSLSELDLSFTFSPKHNAFLCVYKDFIFLKPQTYMNLSGESVLSAKNFY
KTKELLIVHDDLDLPLGVVRFKNGGCGNGGHNGLSIDLLCSNSYYRLRVGISKIGIVIEHVLSPFKHNEEPLKNAA
FEHAKNALKFFIESHDFNAMQNRFTLKKPLKIES

Seq ID 299

MKKSCLCSFPLTFNSNPLQALVIELLEEIKTSPHKGTFAKAVLDSKKPRQVLGVYNISPHKKLTLTITHISTAIVYQ
PLDEKLSLETTLNPNRPTIPRNTQIVFSSKELKESHPHQMPSLNAPMQKPQNKPHSSQQPSQNFSYPEPKLGSKNS
KNSLLQPLAIPSKISPTNETQTPNTDKPPLKHSSSEDQESNLFITPTEKTLNNTSNADISENNESNENKDNVEK
QAIRDANIKEEFACGKWVYDDENLQAYRPSILKRVEDKQTATDITPCDYSTAENKSGKIITPYTKISVHKTEPLEE
PQTFEAKNNFAILQARSSTEKCKRARARKDGTTRQCYLIEEPLKQAWESSEYBITTQLVKAIYERPKQDDQVEPTFY
ETSELAYSSTRKSEITHNELNLNEKFMFEVVEYEGHYLNDIKESSEYKEWVKNHVRFKEGVCMALIEIEEQPRAKS
TPLSIENSRRVVCVKKGNLYLFNEV

Seq ID 300

MNAFKRIISVGVIALGLFNLLDAKHHKEKKENHKITRELKVGANPVPHAQILQSVVDDLKEKGKILVIVSFTDYVL
PNLALNDGSLDANYFQHRPYLDRFNLDKRMHLVGLANIHVEPLRFYSQKITDIKNLKKGSVIAVPNDPANQGRALI
LLHKQGLIALKDPSNLYATEFDIVKNPYNIKIKPLEAALLPKVLGDVDGAIITGNALQAKLTGALFSEDKDSPYA
NLIAAREDNAQDEAIKTLIEALQSEKTRKFILDITYKGAIIPAF

Seq ID 301

MKNLRYKLLLFVFIGFWGLLALNLFILSVKNQEYYEKLAERNMTKKEFLVPTRGNITDRNDEFLATNELVFGVFLP
SGLKQKDLLEKIEIIQKFFPNFNSKETLLNNYQKENSYNHNLIKVVGFIPIYATMQPLYAKLIQTQGFALPLDKRY
YPNNALASHVLGYVGVASLQDLKDEENQYSQIVGKTGIEKEYNKLQKGVGYKIMRVNALNQELATLEVVLPSN
NHLQLSLDKRLQKEADKLFENKRGAILVMDAENGELLVAGSYPEYNLNDFVGGISQDKWQLQDDIYNPLNRFAN
ALYPGGSVVMKMGVGLSFLENLHITENTTIPTPPFIEVGKHKFRDWKKTGHGNSNLYKAIRESDVVFYKFGLEISI
EKLSTLREVGFGEKTGVDLPNEFVGIVPDNLWKLKRFNQDWRVGDLTITAIGQGSFLATPLQVLAYTGLIATGKL
ATPHFAINNKPQPLKDPNLSFQKKLQALRVGMYEVCNHKDGTAHYHSTRGSKITLACKTGTAQVVEIAQNIVNRMEKE
KDMEYFHRSHAWITAFLPYEKPKYAITILVEHGEKGSGLGGLLVKMSNKLVELGYL

Seq ID 302

MFSGLIHQIAKVKSFHNNILNIESDLNPKLGDSIAINGACLTAEISSKTHFSVELSQKTQNSVALENYKDLVHIEP
ALKADASLDGHFVQGHIDAIGVIEKIIHNANQVDFISASEETLLLCVEQGSIAVDGVSLLTSKVBEKGFWLTIIIP
YTLENTLFKAYKLKRRVNIETDMLVRSVASILKKTGKGFENKFSWNEADALTGY

Seq ID 303

KKSERFKIELKPFKKRPNRGHRRALFQAYRSGFAFRSH

Seq ID 304

WFAKKDFSASWATKRAF

Seq ID 305

NLQTHLRLKRSEFVGQKGIIRGHGEVFFKRNFNAQPYLIGFTGLDFWQTFRLACECDGFDCHGFNGVL

Seq ID 306

TQAIILKKNQAWGRGWIMRGVASIINSRE

Seq ID 307

AMWILLKTSKTRNSKIVWNLSKGLMSQSPLSLPLFITLGALSPLKKK

Seq ID 308

KKKSKNSKNSPFAWKCLSMCGV

Seq ID 309

KKLIKSLALKKDTAIVMKSTPNTAKSGKIRA

Seq ID 310

RGATPPRKKTLFLKKPSVLSRPNS

Seq ID 311

SAQPPSLKRSLGGLKAMA

Seq ID 312

KHDHGFVVRHSREF

Seq ID 313

AKNTALKSLALGIRAMAMCM

Seq ID 314

RFRQNLRLRYGSIGLQQLFIHRKPHYQNKSNLNLGFDYHRLIRASQWVLQHSKSAQQTQR

Seq ID 315

SSVSSKKPAKNSLTRFLSSQGIILTAMNTLKTICISLNPCLFYMPLL

Seq ID 316

KWNISTPKPPPKNAGIAGIISLLSKTILIIILGI

Seq ID 317

KTRWIPTEKWRNSTMEARRPFFRPFN

Seq ID 318

KNFRAHDFERRDCQYFYSVWRRAMGDSSSYHASGWAKLRGGSGSGFYGYRLGRCLDEYDTAFLGFARFSHCGFGR

Seq ID 319

KARLKRQIIPILISAELQAMR

Seq ID 320

RAPFRREPWRLLGGCCNL

Seq ID 321

FTRHKQTSRSKRSKSLSVKNGVR

Seq ID 322

FFSYIQYERRSSGYHRAWPFFRERFD

Seq ID 323

RDLLAIPQRFARKQAFKKPSL

Seq ID 324

KSPKATKKRF

Seq ID 325

ALEQDERFTRGG

Seq ID 326

PISCKAPKFVVSLENSGMPDLGPPWKGKTATKSLNSLFLKRSKNSLWVLKTIALALTFLCSSLMAELITLALPKL
PFKILSPPLAAKGSALTGRKISVFRL

Seq ID 327

KSITSRQAIKPILRA

Seq ID 328

FKTLVELFKSQIPGAFRKHSHPHSNFSVFKKSGKSGV

Seq ID 329

NAIMKPKKPQYLKNSLSSNFMITPLLKSKP

Seq ID 330

IKALKPSLFFERLNSLN

Seq ID 331

AMLFRRFVTVSPTYAQAPQVLEVTVPDGVPRRLPSLPFSWHTPKESFTNAAGILSKSFTTA

Seq ID 332

GLFQNLTPHSKTPRSLRRANALKQKRVLTPLLAC

Seq ID 333

FVGPEVPPIATPKKNPKCKFSRLKIAGLNNTSVPAP

Seq ID 334

IRAFFKGVNLANFIDYGRDSRIFGSDDFISGVSGSGEFACKKTPVFGYFAIDLKIPFANGCLVVLISIQPFKRPSHQ
IAVRKTPVFQKRVQFAGIKTRL

Seq ID 335

KFFSNHLRRKVVFIDISLHVNAFLAHSNKSHSMQQSVKAIF

Seq ID 336

SVGVKSPPNSTSA

Seq ID 337

TLTCKKVASKRALICALISLTLNTSTSSPFYSKRVRSLKSPKNMIKTKNPTPASHNAFCMGVGKVI

Seq ID 338

ASMSLSNPVPLGIAAVTPTIFSSFLANSKRVLLEYASVGDKIALLDFLDKPVSKSKGPTPCHFS

Seq ID 339

IFLSNTSLCMGRNTCNTKSNENALASLNTSKKSMHSKRALLKSFNFSCAFLSMGMELSIPTSSISCWICRLSAIK
KFPVEQPKS

Seq ID 340

RDFQVLKHLHPFFIFTQQAMIHKNSDQIILNGSVQQRS DHRIHAPTHRAQNLVS DFFFQSCDFSLSEMLHP
SFFTAN

Seq ID 341

IIHMRGDHSHMPSFFQRFKTKRCHRSAITGVFKTIHD

Seq ID 342

IIIPAVLANDHAHINLRLGVDKKRASFLDIEKGKSGRFAIFHAD

Seq ID 343

KNRPSKNPLAQNAVVSALAPGKTSY

Seq ID 344

KPSSVWIYKPIIRGKNIQTIPS

Seq ID 345

SSVSSKKPAKNSLTRFLSSQGIILTGAMNTLKTICISLNPCLFYMPLL

Seq ID 346

RARSRLGFFLLKASCKTPHKSLNFHLSNSKQGWRIKFWK

Seq ID 347

VSEILSTLVSPSKLPEEPKAKLMRWGASAPFLGSNCKRGGFMPASDPSLLKCKRPPSNTLGLAADPPTNSPGSGTI
TLKFHSAPPL

Seq ID 348

LPNLNKISSSSFTKYTSKTSGLMWHSLKGFHFFPKA

Seq ID 349
SRFRERVAALFTKRAQRKRFRHSFIA

Seq ID 350
NIHWPHAPNRSLLNPKIVAGNPSSLEYRFALNSPQKAPQHR

Seq ID 351
PISCKAPKFVVSLCNSGMPLDLGPWKGTATKSLNSLFLKRSKNSLWVLKTIALALTFLCSSLMAEILITALEPKL
PPKILSPPLAAGSLTGRKISVFRL

Seq ID 352
ESLVLKPILGKRRCKGCCPPSKPLLAL

Seq ID 353
GSNERSHKERLSIQTHRIASRDFDICPL

Seq ID 354
LGGNKSFTLYSHHTSQPFPSKRIATCSKTSLSKQGLFVRLSMKKASGTPHFLCRLKHQSGRFSIMVFRRFFPLIGT
NSTFSIASKATSLKVF

Seq ID 355
AFVLKPCKKACSWSFKFSLANSTLESKLLYSFK

Seq ID 356
ESSISLILSKIMIVSLMEYPIKVSKAAITSKFISILKTITELATKITSCTSAMTLAKAKRHS